The Biomarker Catalogue

CHIRON CHIRON CHIRON

The collection of reference standards

Distrubuted by:

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Greyhound CHROMATOGRAPHY AND ALLIED CHEMICALS

Professor Dr. Nils Andreas Sørensen (1909-1987)

I would like to dedicate this catalogue to a great and unique chemist, teacher and personality, the late Professor Nils Andreas Sørensen.

Professor Nils Andreas Sørensen was born in Oslo in 1909, moved to Trondheim and finished his master's degree at The Norwegian Institute of Technology (NTH) in 1933. As a student of Professor C.N. Riiber he received his doctor degree in 1937, moved to Heidelberg in 1938 where he studied with the Nobel laureate Richard Kuhn until he was appointed Professor in Organic Chemistry at NTH in 1939, at just 30 years of age.

Professor Sørensen contributed to several important areas of natural product chemistry. His scientific production covers the chemistry of mutarotation of sugars, and the chemistry of carotenoids. He was also the first to discover naturally occurring acetylenic compounds. Professor Sørensen was, in addition to being a unique chemist, an expert in botany which he combined with his chemistry background in a superb manner. He followed a tradition of natural product chemistry in Trondheim which has been manifested by later groups at NTH.

In addition to lecturing on specialized topics in traditional natural product chemistry, such as steroids and triterpenoids, he lectured on mycotoxins and chemotherapeutica. The results of the latter topics can be found in this catalogue. Professor Sørensen has given much inspiration to generations of organic chemists in Trondheim and elsewhere in Norway.

Professor C.N. Riiber was a gentleman from the "old school", elegant and witty in his form, with a tremendous precision characterizing his work. Professor Richard Kuhn's work revealed a stringent sense of formality and an exceptional ability to focus on essential problems. Influence and inspiration from these masters imprinted Professor Sørensen with a sparkling and elegant wit which distinguished him as a brilliant teacher and inspiring lecturer. Nonetheless are Professor Sørensen's immense knowledge and relentless curiosity probably the most distinguishing features of his personality. Professor Sørensen had, in addition, a relentless source of energy. He has, quite correctly, been described as a lighting bolt in a double breasted suit with an outdoor Alp hat and an indoor cigar. The picture of Professor Sørensen is not complete before mentioning that he was an enthusiastic moose hunter, mountain climber and farmer.

Source: "Sørenseniader"

Dr. Jon E. Johansen
Chair, Chiron AS

Innovative and sophisticated standards - Creative solutions

Chiron AS in fast development

For more than 25 years Chiron has supplied oil and gas companies and analytical laboratories throughout the world with reference substances of high purity for geochemical and environmental analysis. Profile companies and institutions throughout the world have benefited from our supply of unique reference standards.
High focus on basic research applied to environmental and petroleum problems has brought Chiron to the fore-front of analytical chemistry. This is a result of many years of investments, the enthusiasm and frontier spirit of our team, and a close cooperation with academic institutions and customers worldwide.
In this catalogue you will find, in addition to a number of new products related to petroleum and environmental applications, two new sections: “Food safety” and “Pharmaceutical and forensic”.

Several patented products and applications are included in our catalogue, and new inventions are continually under development. Updates on new products are included in our Biomarker Focus mailings and new products catalogues (see pdf versions under the ‘Newsletters’ section on www.chiron.no).

Chiron offers a varied, flexible and innovative range of biomarkers to suit the needs of the individual customer. The cover illustrated the strength of our team. If you look for an unique quality and unique compounds, please contact us: We welcome you to the Chiron biomarker era of 2008.

Chiron

Chiron was an immortal god, he was the eldest and wisest of the centaurs, a tribe of half horse-men. As opposed to his brethren Chiron was intelligent, civilized and kind.

He was revered as an astrologer, healer and a great teacher to the likes of Ajax, Heracles and Achilles.

In the end Chiron sacrificed his immortality for allowing humanity to obtain the use of fire.

Chiron:- Our symbol of strength.

The Biomarker catalogue–2008

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Chapter I: General

How to order

We need the following information when you order:

- Catalogue number and product name
- Quantity
- Shipping and invoice addresses

Contact:

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Custom synthesis

Through our experience in the reference standards and fine chemicals markets we have acquired a large network of contacts and suppliers. We also have a fully equipped laboratory where we take on custom synthesis jobs and continually work on developing new and innovative products.

Chiron is currently involved in several EU-projects and has a unique experience in long term research ventures for the petroleum and pharmaceutical industries.

Please contact us for custom synthesis and custom development projects.

Chiron quality standards

Most compounds appearing in this catalogue are synthesized or isolated by Chiron AS.

The products are delivered in neat form or as solutions in high purity solvents. The solutions are normally supplied in flame sealed vials but can be delivered with screw cap bottles or in GC-vials upon request. The purity is assigned by capillary GC unless otherwise stated. The identity is assigned by NMR and MS. MSDS and Certificate of Analysis is available on all products.
Chiron is currently working according to the international quality standard ISO 17025 and ISO 9001.

Special quotations

Please contact us for:

- **"Bulk deliveries"**
- **Custom made solutions**
- **Custom synthesis**

For larger quantities; please ask for special quotations.

Conditions for sale

Complaints

All claims must be in writing and made within 60 days of invoice date. No return will be accepted without prior authorization.

Prices

The prices can be quoted in NOK, USD, EUR or GBP.

Use of products

Our products are offered for LABORATORY USE ONLY and may not be used as drugs, cosmetics or food additives.

Warranty and compensation claims

The stated specifications for each product indicate an average guiding value and may vary for each batch. Any indemnity will be limited to an amount not exceeding the price of the goods.

Units

In this catalogue we have used the following units for concentrations:

mg/mL = 10^{-3}g/mL = 1000μg/mL = 1000ng/μL = 1000ppm

µg/mL = 10^{-6}g/mL = 0.001mg/mL = 1000ng/mL = 1ng/μL = 1ppm

ng/mL = 10^{-9}g/mL = 10^{-6}mg/mL = $10^{-3}\mu$g/mL = 1μg/mL = 10^{-3}ppm

pg/mL = 10^{-12}g/mL = 10^{-6}ppm

ppm: = Parts per million
1 ppm = 1μg/mL = 0.001mg/mL = 0.001g/L
1 ppm = 1μg/g = 0.001mg/g = 0.001g/kg

ppb: Parts per billion
1ppb = 0.001ppm = 10-6mg/mL

Note: 1 European billion is 1000 European milliards (= 1000 US billions)

Concentrations of Standards can be given as:

Weight by total weight: w/w
Weight by total volume: wt%
Volume by total volume:vol%

Weight by volume is most common and usually used by Chiron

Sulfur Concentration:

Sulfur concentration is given as % weight sulfur by total volume or weight

How exact is your solution?

You can make a solution by dissolving the analyte in an exact volume or by weighing the final solution. By using a volumetric flask you will always depend on the temperature in the room. A volumetric flask is equilibrated at an exact temperature and you have to keep the same room temperature in order to make a reproducible concentration.

However, by weighing the solution you will always make a solution in exactly the same way each time, independent of the temperature in the room. Good Laboratory Practice at Chiron is to weigh all solutions.

To make an exact solution from the Chiron ampoulle, transfer the content of the vial into your flask and weight to exact volume (use the densities below). Alternatively, but less exact, dilute to a fixed volume in a volumetric flask.

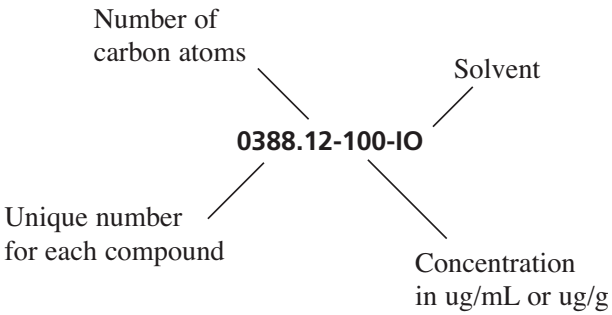
The following solvent-densities are used for Chiron solutions:

Acetone	0.7910 g/mL	Hexane	0.6603 g/mL
Acetonitrile	0.7826 g/mL	Isooctane	0.6919 g/mL
Chlorobenzene	1.1069 g/mL	Methanol	0.7914 g/mL
Cyclohexane	0.7800 g/mL	Pentane	0.6260 g/mL
Benzene	0.8700 g/mL	Toluene	0.8667 g/mL
Dichloromethane	1.3260 g/mL		

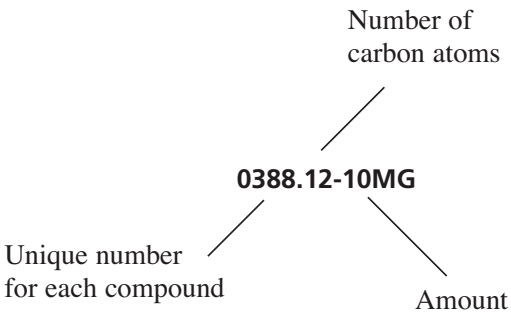
Updated numbering in our catalogue

NEW

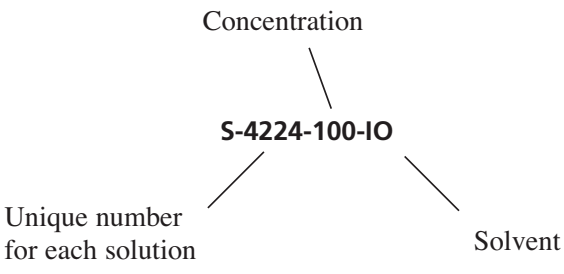
Numbering for single, pure compounds in solution:



Numbering for single compounds, neat:



Numbering for solutions:



Concentrations

1 = 1µg/mL, 1.1µg/mL
10 = 10µg/mL
100 = 100µg/mL = 0.1mg/mL
K = 1000µg/mL = 1mg/mL
5K = 5000µg/mL = 5mg/mL
0,1Wt% ≈ 100µg/g

Weight

100 = 100µg/g ≈ 0,1Wt%
K = 1000µg/g ≈ 1Wt%

Amounts

10UG = 10µg
10MG = 10mg
100MG = 100mg
1G = 1g
1KG = 1kg
1UL = 1µl

Solvents

1,2,3-Trichlorobenzene	TB
Acetone	AC
Acetonitrile	AN
Benzene	B
Benzene d6	BD
Carbon disulfide (CS_2)	CS
Chlorobenzene	CB
Cyclohexane	CY
Dichloromethane/Methylene chloride	DC
Dioxane	DI
DMF	DF
DMSO	DS
Dodecane	DD
Ethanol	ET
Heavy white Mineral oil (70cSt)	HW
Heptane	HP
Hexane	HX
Isooctane	IO
Isopropanol	IP
Light white Mineral oil (20cSt)	LW
Methanol	ME
Methyl-tert-butyl ether (MTBE)	MT
n-Hexadecane	HD
n-Hexane	HX
n-Nonane	NN
n-Octane	OC
n-Pentane	PE
Pentane	PE
Petroleum ether	PT
RFA Gasoline	RF
t-Butyl methyl ether	BM
Toluene	T
Ultralight white Mineral oil (3cSt)	3C
Water	W
Xylene	XY
Mix of solvents	MX

Common abbreviations

ABS	Alkylbenzenesulfonate
AED	Atiomic Emission Detection
ASP	Amnesic Shellfish
ASTM	American Society For Testing and Materials
BAF	Bioaccumulating Factor
BaP	Benzo[a]pyrene
BCF	Bioconcentration Factor
BDE	Bromodiphenylether
BOD	Biochemical Oxygen Demand
BP	British Pharmacopeia
BSA	N,O-Bis(trimethylsilyl)acetamide
BSTFA	N,O-Bis(trimethylsilyl)trifluoroacetamide
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
BZ-system	Numbering system for PCBs according to Ballschitter and Zell
CA	Chemical Abstract
CAS No.	Chemical Abstract Service Registry Number
CD	Circular Dichroism
CEN	Comite Europeen de NorEuropean Committee for Standardization
centi	Hundredth (10^{-2})
Ci	Curie (Unit)
CMR	Carcinogenic, mutagenic and toxic to reproduction
CoA	Coenzyme A
COD	Chemical Oxygen Demand
COPIND	Causing Organophosphate Induced Neuropsyhiatric Disorder
CP	Chemically Pure
CRM	Certified Reference Materials
DBT	Dibutyltin
DDD	1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane
DDE	1,1-Dichloro-2,2-bis(p-chlorophenyl)ethylene
DDT	1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane
deca	Tenth (10^{-1})
deci	Tenth (10^{-1})
DHA	Docosahexaenoic acid
DIPE	Diidopropyl ether
DIS	Draft International Standard
DMDMP	Dimethyldibenzothiophene
DMF	Dimethylformamide
DMN	Dimethylnaphthalene
DMP	Dimethylphenanthrene
DMSO	Dimethyl sulfoxide
DNA	Deoxyribonucleic Acid
DNBP	Dinoseb
DOT	Dioctyltin
DPA	Docosapentaenoic Acid
DPT	Diphenyltin
DRO	Diesel Range Organics
DSP	Diarrhetic Shellfish
DT50	Degradable Total to 50 % (Half -time)
Dutch Seven	A mixture of seven commonly occurring PCBs
EAOG	European Association of Organic Geochemists
EC	European Community
ECD	Electron Capture Detection
EDTA	Ethylenediaminetetraacetic acid
EDXRF	Energy Dispensive X-ray Fluorescence Spectroscopy
EEC	European Economic Community
EFSA	The European Food Safety Authority
EI	Electron Capture Detection
ELCD	Electrolytic Conductivity Detectors
EMEC	European Meeting on Environmental Chemistry
EN	European Norm
EP	European Pharmacopeia
EPA	The US Environmental Protection Agency
EPH	Extractable Petroleum Hydrocarbons
EAA	Ether-Alcohol-Aromatic
EAA	European Aluminium Association
FAME	Fatty Acid Methyl Ester
FID	Flame Ionization Detection
FOSA	Perfluorooctane Sulphonamide
F-PAH®	Fluorinated PAHs, Internal Standards
F-PBDE®	Fluorinated PBDEs, Internal Standards
F-PCB®	Fluorinated PCBs, Internal Standards
FPD	Flame Photometric Detection
FTCA	Perfluorohexanoic acid
FTOH	Perfluorohexan-1-ol
giga	Billion, Milliard (10^{9})
GLF	General Food Law (EU)
GRO	Gasoline Range Organics
hecto	Hundred (102)
Heptacosa	Perfluoro-tri-n-butylamine
HFBA	Heptafluorobutyric anhydride
HMDS	1,1,1,3,3,3-Hexamethyldisilazane
HRGC	High Resolution GC
ICP-AES	Inductive Coupled Plasma Atomic Emission Spectroscopy
IDF	International Dairy Federation
IMO	International Maritime Organisation
IMOG	International Meeting on Organic Geochemistry
IRMS	Isotope Ratio Mass Spectrometry
ISPAC	International Society for Polycyclic Aromatic Compounds
ISTD	Internal Standard
ITX	Isopropylthioxanthone
IUPAC	International Union of Pure and Applied Chemistry
kilo	Thousand (10^{6})
L(E)C50	Lethal Concentration to 50 %
LAS	Linear Alkylbenzenesulfonates
LD	Lethal Dose
log Kow	Partition coefffient octanol/water
MAGME	Methyl Acrylamido Glycolate Methyl Ether
MBT	Monobutyltin
MCCP	Medium Chain Chlorinated Alkanes
MCPA	4-Chloro-2-methylphenoxyacetic Acid
MDL	Method Detection Limit
MDMC	Minimum Detectable Mutagenic Concentration
MDMP	Methyldibenzothiophene

mega	Million (10^6)
micro	Millionth (10^{-6})
milli	Thousandth (10^{-3})
MN	Methylnaphthalene
MOT	Monooctyltin
MP	Methylphenanthrene
MPLC	Mediium Pressure Liquid Chromatography
MPT	Monophenyltin
MSTFA	N-Methyl-N-(trimethylsilyl)trifluoroacetamide
MTBE	tert-Butyl methyl ether
MW	Molecular Weight
nano	Billionth, Milliardth (10^{-9})
NBA	3-Nitrobenzanthrone
NCI	Negative Ion Chemical Ionization
NIGOGA	The Norwegian Industry Guide to Geochemical Analysis
NIST	National Institute for Standards and Technology
NMR	Nuclear Magnetic Resonance
NPD	Naphtalenes, Phenanthrenes, Dibenzothiophenes
NPE(O)	Nonylphenol Polyethoxylates
OPEO	4-tert-Octylphenol Polyethoxylates
ORD	Optical Rotatory Dispersion
OSPAR	Commision of the Conv. for the Protection of the Marine Env. of the North-East Atlantic
PAC	Polycyclic Aromatic Compounds = PAH
PAH	Polycyclic Aromatic Hydrocarbons
PANH	Nitrogenheterocyclic PAHs
PAR	Precision and Recovery
PASH	Sulfurheterocyclic PAHs
PB	Inducers Phenobarbital
PBB	Polybrominated Biphenyls
PBDE	Polybrominated Diphenylethers
PBN	Polybrominated Naphthalenes
PBN	Polybromonaphthalene
PBT	Persistant Bioaccumulating Toxicants
PCA	Polychlorinated Alkanes
PCB	Polychlorinated Biphenylethers
PCDD	Polychlorinated Dibenzo-p-dioxines
PCDF	Polychlorinated Dibenzofurans
PCN	Polychlorinated Naphthalenes
PFA	Polyfluorinated Alkanes
PFAS	Polyfluoroalkane Sulfonates
PFB	Perfluorobenzoyl Derivative
PFBBr	Perfluorobenzoyl Bromide
PFBS	Perfluorobutane Sulfonate (sulfonic Acid)
PFC	Polyfluorinated Organic Compounds
PFCA	Perfluorocarboxylic Acid
PFDA	Perfluorodecanoic Acid
PFHS	Perfluorohexane Sulfonate
PFNA	Perfluorononanoic Acid
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane Sulfonic Acid
PFUA	Perfluoroundecanoic Acid
pico	Trillionth, Billionth (10^{-12})
PINA	Paraffins, Isoparaffins, Naphthenes, Aromatics
PIONA	Paraffins, Isoparaffins, Olefins, Naphthenes, Aromatics
PMS	Postmitochondrial supernatant
PNA	Paraffins, Naphthenes, Aromatics
PONA	Paraffins, Olefins, Naphthenes, Aromatics
POP	Persistant Organic Pollutants
POSH	Oxygenheterocyclic PAHs
ppb	Parts pr billion
ppm	Parts per million
PSP	Paralytic Shellfish
PUF	Polyuretane Foam
PVC	Polyvinylchloride
QSAR	Quantitatative Structure Activity Relationship
RCRA	Resource, Conservation, and Recovery Act
RNA	Ribonucleic acid
RRO	Residue Range Organics
SCCP	Short Chain Chlorinated Alkanes
SCS	System Calibration Standard
SETAC	Society of Environmental, Toxicology and Chemistry
SFT	Norwegian Pollution Control Authority
SIMDIS	Simulated Distillation
SOP	Standard Operating Procedure
SRM	Standard Reference Materials
STP	Sewage Treatment Plant
TAME	tert-Amylmethyl ether
TBT	Tetrabutyltin (Chloride)
TCDD	2,3,7,8-Tetrachlorodibenzo-p-dioxin
TCT	Tricyclohexyltin
TDI	Tolerable Daily Intake
TE-GC-MS	Thermal Extraction Capillary GC-MS
TeMN	Tetramethylnaphthalene
TEPA	Tris-(aziridinyl)-phosphineoxide
TEX	Toluene-Ethylbenzene-Xylenes
TFAI	1-(Trifluoroacetyl)imidazole
TFAA	Trifluoroacetic Anhydride
THC	Tetrahydrocannabinol
THF	Tetrahydrofuran
THM	Trihalomethanes
TLC	Thin Layer Chromatography
Tm	17·(H)-22,29,30-Trisnorhopane
TMCS	Chlorotrimethylsilane
TMN	Trimethylnaphthalene
TMP	Trimethylphenanthrene
TMP	Trimethylphosphate
TMSI	1-(Trimethylsilyl)imidazole
TmTP	Tri-m-tolylphosphate
ToTP	Tri-o-tolylphosphate
TPP	Triphenylphosphate
TPT	Triphenyltin (Chloride)
TpTP	Tri-p-tolylphosphate
Ts	18·(H)-22,29,30-Trisnorneohopane
TTP	Tritolylphosphate (isomer mixture)
UNEP	United National Environment Programme
USP	US Pharmacopeia
UST	Underwater Storage Tank
VOC	Volatile Organic Compounds
WHO	World Health Organization
XRF	Wavelength Dispensive X-ray Fluorescence

Chapter II: Methods

Table of contents

ISO methods

ISO 6468:1996
Water quality - pesticides, PCBs, chlorobenzenes

Water quality - Determination of certain organochlorine insecticides, polychlorinated biphenyls and chlorobenzenes - Gas chromatographic method after liquid-liquid extraction

This test method covers the determination of certain organochlorine insecticides, polychlorinated biphenyls (PCBs) and chlorobenzenes (except the mono- and dichlorobenzenes) in drinking waters, ground waters, surface waters and waste waters.

Chiron No.	Compound	Abbr.	CAS No.	Conc. 1 mL
	Organochlorine pesticides			
3319.6-100-CY or AN	alpha-HCH (alpha-BHC)		[319-84-6]	100 µg/mL
3415.6-100-CY or AN	beta-HCH (beta-BHC)		[319-85-7]	100 µg/mL
2026.6-100-CY or AN	gamma-HCH (gamma-BHC)	Lindane	[58-89-9]	100 µg/mL
3321.6-100-CY or AN	delta-HCH (delta-BHC)		[319-86-8]	100 µg/mL
3318.6-100-CY or AN	epsilon-HCH (epsilon-BHC)		[6108-10-7]	100 µg/mL
3361.14-100-CY or AN	1,1-Dichloro-2-(o-chlorophenyl) -2-(p-chlorophenyl)ethylene	o,p'-DDE	[3424-82-6]	100 µg/mL
3362.14-100-CY or AN	1,1-Dichloro-2,2-bis(p-chlorophenyl)ethylene	p,p'-DDE	[72-55-9]	100 µg/mL
3357.14-100-CY or AN	1,1-Dichloro-2-(o-chlorophenyl)- 2-(p-chlorophenyl)ethane	o,p'-TDE	[53-19-0]	100 µg/mL
3356.14-100-CY or AN	1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane	p,p'-TDE	[72-54-8]	100 µg/mL
3363.14-100-CY or AN	1,1,1-Trichloro-2-(o-chlorophenyl)- 2-(p-chlorophenyl)ethane	o,p'-DDT	[789-02-6]	100 µg/mL
2028.14-100-CY or AN	1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane	p,p'-DDT	[50-29-3]	100 µg/mL
3448.16-100-CY or AN	1,1,1-Trichloro-2,2-bis(p-methoxyphenyl)ethane	Methoxychlor	[72-43-5]	100 µg/mL
2774.12-100-CY or AN	Aldrin	Aldrin	[309-00-2]	100 µg/mL
2775.12-100-CY or AN	Dieldrin	Dieldrin	[60-57-1]	100 µg/mL
1892.12-100-CY or AN	Endrin	Endrin	[72-20-8]	100 µg/mL
2776.10-100-CY or AN	Heptachlor	Heptachlor	[76-44-8]	100 µg/mL
2777.10-100-CY or AN	Heptachlor-epoxide (trans)	Heptachlor-epoxide	[1024-57-3]	100 µg/mL
3387.9-100-CY or AN	alpha-Endosulfan		[959-98-8]	100 µg/mL
3388.9-100-CY or AN	beta-Endosulfan		[33213-65-8]	100 µg/mL
	Chlorobenzenes			
3330.6-K-IO or AN	1,2,3-Trichlorobenzene	123-TrCB	[87-61-6]	1000 µg/mL
3519.6-K-IO or AN	1,2,4-Trichlorobenzene	124-TrCB	[120-82-1]	1000 µg/mL
3749.6-K-IO or AN	1,3,5-Trichlorobenzene	135-TrCB	[108-70-3]	1000 µg/mL
3751.6-K-IO or AN	1,2,3,5-Tetrachlorobenzene	1235-TeCB	[634-90-2]	1000 µg/mL
3656.6-K-IO or AN	1,2,4,5-Tetrachlorobenzene	1245-TeCB	[95-94-3]	1000 µg/mL
2025.6-K-IO or AN	Pentachlorobenzene	PeCB	[608-93-5]	1000 µg/mL
1356.6-K-IO or AN	Hexachlorobenzene	HCB	[118-74-1]	1000 µg/mL
3474.6-100-CY or AN	Pentachloronitrobenzene (=Quintozene)	PCNB	[82-68-8]	100 µg/mL

	Polychlorinated biphenyls			
1999.12-100-IO or AN	2,4,4'-Trichlorobiphenyl	PCB-28	[7012-37-5]	100 µg/mL
2000.12-100-IO or AN	2,2',5,5'-Tetrachlorobiphenyl	PCB-52	[35693-99-3]	100 µg/mL
2001.12-100-IO or AN	2,2',4,5,5'-Pentachlorobiphenyl	PCB-101	[37680-73-2]	100 µg/mL
2003.12-100-IO or AN	2,2',3,4,4',5'-Hexachlorobiphenyl	PCB-138	[35065-28-2]	100 µg/mL
2004.12-100-IO or AN	2,2',4,4',5,5'Hexachlorobiphenyl	PCB-153	[35065-27-1]	100 µg/mL
2005.12-100-IO or AN	2,2'3,4,4',5,5'-Heptachlorobiphenyl	PCB-180	[35065-29-3]	100 µg/mL
2268.12-100-IO or AN	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	PCB-194	[35694-08-7]	100 µg/mL

ISO 7981-1:2005
Water quality - Six PAHs by TLC

Water quality - Determination of polycyclic aromatic hydrocarbons (PAH) –

Part 1: Determination of six PAH by high-performance thin-layer chromatography with fluorescence detection after liquid-liquid extraction.

This part of ISO 7981 specifies the determination of six selected PAH in drinking water using high performance TLC.

Single-substance stock solutions

Chiron No.	Name	CAS No.	Concentration
0260.16-10-AN	Fluoranthene	[206-44-0]	10µg/mL
0263.20-10-AN	Benzo[b]fluoranthene	[205-99-2]	10µg/mL
0239.20-10-AN	Benzo[a]pyrene	[50-32-8]	10µg/mL
0265.20-10-AN	Benzo[k]fluoranthene	[207-08-9]	10µg/mL
0277.22-10-AN	Indeno[1,2,3-cd]pyrene	[193-39-5]	10µg/mL
0222.22-10-AN	Benzo[ghi]perylene	[191-24-2]	10µg/mL
3831.6-KIT	ISO 7981-1 Single substance Kit		6 samples

S-4062-ASS-5AN

Multiple-substance stock solution (="6 priority PAH – drinking water analysis")

6 Analytes, each 2-10µg/mL in acetonitrile; unit: 1x5mL

Chiron No.	Name	CAS No.	Concentration
0260.16	Fluoranthene	[206-44-0]	10µg/mL
0263.20	Benzo[b]fluoranthene	[205-99-2]	2µg/mL
0239.20	Benzo[a]pyrene	[50-32-8]	2µg/mL
0265.20	Benzo[k]fluoranthene	[207-08-9]	2µg/mL
0277.20	Indeno[1,2,3-cd]pyrene	[193-39-5]	2µg/mL
0222.22	Benzo[ghi]perylene	[191-24-2]	2µg/mL

ISO 7981-2:2005
Water quality – Six PAHs by HPLC

Water quality - Determination of polycyclic aromatic hydrocarbons (PAH) -

Part 2: Determination of six PAH by high-performance liquid chromatography with fluorescence detection after liquid-liquid extraction

This part of ISO 7981 specifies the determination of six PAH in drinking, mineral, table waters and ground and surface waters in mass concentrations 0.005µg/L, by high-performance liquid chromatography (HPLC) and fluorescence detection after liquid-liquid extraction.

Single-substance stock solutions
1x1mL each

Chiron No.	Name	CAS No.	Concentration
0260.22-10-AN	Fluoranthene	[206-44-0]	10µg/mL
0263.20-10-AN	Benzo[b]fluoranthene	[205-99-2]	10µg/mL
0239.20-10-AN	Benzo[a]pyrene	[50-32-8]	10µg/mL
0265.20-10-AN	Benzo[k]fluoranthene	[207-08-9]	10µg/mL
0277.22-10-AN	Indeno[1,2,3-cd]pyrene	[193-39-5]	10µg/mL
0222.22-10-AN	Benzo[ghi]perylene	[191-24-2]	10µg/mL
3832.6-KIT	ISO 7981-2 Single substance Kit		6 samples

S-4454-10-5AN

Multiple-substance stock solution
6 Analytes, each 10µg/mL in acetonitrile; unit: 1x5mL

Chiron No.	Name	CAS No.	Concentration
0260.22	Fluoranthene	[206-44-0]	10µg/mL
0263.20	Benzo[b]fluoranthene	[205-99-2]	10µg/mL
0239.20	Benzo[a]pyrene	[50-32-8]	10µg/mL
0265.20	Benzo[k]fluoranthene	[207-08-9]	10µg/mL
0277.22	Indeno[1,2,3-cd]pyrene	[193-39-5]	10µg/mL
0222.22	Benzo[ghi]perylene	[191-24-2]	10µg/mL

Calibrations solutions are made by request according to customer specifications.

ISO 8165-1:1999
Water quality - Monovalent phenols

Water quality – Determination of selected monovalent phenols -

Part 1: Gas-chromatographic method after enrichment by extraction

This international method specifies a method for determining phenols by a gas chromatographic method. The determination of selected phenols and nitrophenols in drinking water, ground water and surface water. The method provides a procedure for solid-phase extraction of nitrophenols, followed by solvent elution, derivatization with diazomethane and determination by gas chromatography and mass spectrometry.

S-4351-100-ME

ISO 8165-1 Phenol Standard Stock Solution

35 Analytes, each 100µg/mL in methanol; unit: 5x1mL

Chiron No.	Compound	CAS No.
1427.6	Phenol	[108-95-2]
1403.7	2-Methylphenol (o-Cresol)	[95-48-7]
1404.7	3-Methylphenol (m-Cresol)	[108-39-4]
1358.7	4-Methylphenol (p-Cresol)	[106-44-5]
1406.8	2,4-Dimethylphenol	[105-67-9]
1411.8	4-Ethylphenol	[123-07-9]
1448.15	2,6-Di-tert-butyl-4-methylphenol (2,6-Bis(1,1-dimethylethyl)-4-methylphenol)	[128-37-0]
1806.12	2-Phenylphenol	[90-43-7]
2388.13	2-Benzylphenol	[28994-41-4]
2439.14	2-Benzyl-4-methylphenol	[716-96-1]
2062.6	2-Chorophenol	[95-57-8]
2067.6	3-Chlorophenol	[108-43-0]
2068.6	4-Chlorophenol	[106-48-9]
2070.7	4-Chloro-2-methylphenol	[1570-64-5]
2071.7	4-Chloro-3-methylphenol	[59-50-7]
2379.8	2,4-Dichloro-3,5-dimethylphenol	[133-53-9]
2500.11	2-Cyclopentyl-4-chlorophenol	[13347-42-7]
2378.10	6-Chloro-5-methyl-2-(1-methylethyl)phenol(6-Chorothymol)	[89-68-9]
2066.6	2,3-Dichlorophenol	[576-24-9]
2064.6	2,4-Dichlorophenol	[120-83-2]
2065.6	2,5-Dichlorophenol	[583-78-8]
2069.6	2,6-Dichlorophenol	[87-65-0]
2076.6	2,4,6-Trichlorophenol	[88-06-2]
2073.6	2,3,5-Trichlorophenol	[933-78-8]
2075.6	2,4,5-Trichlorophenol	[95-95-4]
2072.6	2,3,6-Trichlorophenol	[933-75-5]
2081.6	2,3,4,5-Tetrachlorophenol	[4901-51-3]
2149.6	2,3,4,6-Tetrachlorophenol	[58-90-2]
2074.6	2,3,5,6-Tetrachlorophenol	[935-95-5]
2084.6	Pentachlorophenol	[87-86-5]
2376.10	1-Naphthol	[90-15-3]
2377.10	2-Naphthol	[135-19-3]
2063.7	2-Chloro-5-methylphenol (6-Chloro-3-methylphenol)	[615-74-7]
2440.10	2-Chloro-4-tert-butylphenol	[98-28-2]
2441.13	4-Chloro-2-benzylphenol	[120-32-1]

S-4353-K-5AC

ISO 8165-1 Internal Control Stock Solution 1

1 Internal standard, 1000µg/mL in acetone; unit: 1x5mL

2061.6	2,4-Dibromophenol	[615-58-7]

Alternative Internal standard:

ISO 8165-1 Internal Control Stock Standard Solution 2

2470.6	2,5-Dibromophenol	[28165-52-8]

ISO 8165-2:1999
Water quality – Monovalent phenols

Water quality – Determination of selected monovalent phenols –

Part 2: Method by derivatization and gas chromatography

This international method specifies a method for the determination of phenols by gas chromatography, following pentafluorobenzoyl chloride derivatization. It may in particular be applied to the examination of drinking water, ground water and moderately contaminated surface water.

S-4352-300-ME

ISO 8165-2 Phenol Standard Stock Solution 2

33 Analytes, each 300µg/mL in methanol; unit: 5x1mL

Prod.No.	Compound	CAS No.
1427.6	Phenol	[108-95-2]
1403.7	2-Methylphenol (o-Cresol)	[95-48-7]
1404.7	3-Methylphenol (m-Cresol)	[108-39-4]
1358.7	4-Methylphenol (p-Cresol)	[106-44-5]
1406.8	2,4-Dimethylphenol	[105-67-9]
1411.8	4-Ethylphenol	[123-07-9]
1448.15	2,6-Bis(1,1-dimethylethyl)-4-methylphenol	[128-37-0]
1806.12	2-Phenylphenol	[90-43-7]
2388.13	2-Benzylphenol	[28994-41-4]
2439.14	2-Benzyl-4-methylphenol	[716-96-1]
2062.6	2-Chorophenol	[95-57-8]
2067.6	3-Chlorophenol	[108-43-0]
2068.6	4-Chlorophenol	[106-48-9]
2070.7	4-Chloro-2-methylphenol	[1570-64-5]
2071.7	4-Chloro-3-methylphenol	[59-50-7]
2063.7	2-Chloro-5-methylphenol (6-Chloro-3-methylphenol)	[615-74-7]
2379.8	2,4-Dichloro-3,5-dimethylphenol	[133-53-9]
2440.10	2-Chloro-4-tert-butylphenol	[98-28-2]
2500.11	2-Cyclopentyl-4-chorophenol	[13347-42-7]
2441.13	4-Chloro-2-benzylphenol	[120-32-1]
2378.10	6-Chloro-5-methyl-2-(1-methylethyl)phenol	[89-68-9]
2066.6	2,3-Dichlorophenol	[576-24-9]
2064.6	2,4-Dichlorophenol	[120-83-2]
2065.6	2,5-Dichlorophenol	[583-78-8]
2069.6	2,6-Dichlorophenol	[87-65-0]
2076.6	2,4,6-Trichlorophenol	[88-06-2]
2073.6	2,3,5-Trichlorophemol	[933-78-8]
2075.6	2,4,5-Trichlorophenol	[95-95-4]
2072.6	2,3,6-Trichlorophenol	[933-75-5]
2081.6	2,3,4,5-Tetrachlorophenol	[4901-51-3]
2149.6	2,3,4,6-Tetrachlorophenol	[58-90-2]
2074.6	2,3,5,6-Tetrachlorophenol	[935-95-5]
2084.6	Pentachlorophenol	[87-86-5]

2061.6-10-5ME	**ISO 8165-2 Internal Control Stock Solution 1** 1 Internal standard, 10µg/mL in methanol; unit: 1x5mL 2,4-Dibromophenol [615-58-7] Alternative Internal standard:
2470.6-10-5ME	**ISO 8165-2 Internal Control Stock Solution 2** 1 Internal standard, 10µg/mL in methanol; unit: 1x5mL 2,5-Dibromophenol [28165-52-8]

ISO 9377-2:2000 / ISO 9377-MOD (OSPAR) Water quality – Hydrocarbons in water

NEW

Water quality – Determination of hydrocarbon oil index

Part 2: Method using solvent extraction and gas chromatography

ISO 9377-2: Hydrocarbon oil index

The method of choice for the determination of oil and grease in water is the new standard ISO 9377-2, and is based on extraction with a hydrocarbon solvent like pentane or hexane.

This test determines the hydrocarbon oil index in water by means of gas chromatography. The method is suitable for surface water, waste water, and water from sewage treatment plants, and allows the determination of the hydrocarbon oil index in concentrations above 0.1 mg/L.

The index is the sum of compounds with retention times between n-decane and n-tetracontane. Substances complying with this definition are long-chain or branched aliphatic, alicyclic, aromatic or alkylsubstituted aromatic hydrocarbons.

For the determination of mineral-oil content of soils and sediments, see ISO/TR 11046.

ISO 9377-2-Mod: Determination of hydrocarbon oil index down to C7

A modified method for oil in water analysis of produced water from offshore petroleum production installations has recently been taken into force.

ISO 9377-2 is not applicable for volatile hydrocarbons, and a modification of the method is proposed by the OSPAR commission in order to include the determination of certain hydrocarbons with boiling points between 98 and 174 ºC from produced water.

The OSPAR Reference Method of Analysis for the Determination of the Dispersed Oil Content in Produced Water: Reference Number 2005-15.

ISO 9377-2: Standards available from Chiron for the determination of hydrocarbon oil index

S-4215-1ML

ISO 9377-2 Mixture of Mineral Oils A+B without additives
Mixture 1:1 (neat), 1 mL, 5x1 mL

Type A: Diesel fuel without additives
Type B: Lubricant oil without additives

S-4216-SET

ISO 9377-2 Calibration Mixture of Minerals Oils
Mineral oils (S-4215) in pentane, set of 6x5 mL

1: Blank
2: 0.2 mg/mL
3: 0.4 mg/mL
4. 0.6 mg/mL
5. 0.8 mg/mL
6. 1.0 mg/mL

S-4217-K-AC
S-4217-4K-AC
S-4217-10K-AC

ISO 9377-2 Quality Control Standard of Mineral Oils A+B
1000 µg/mL in acetone (500 µg/mL of each A and B), 1x1mL, 5x1mL, 10x1mL
4000 µg/mL in acetone (2000 µg/mL of each A and B), 1x1mL, 5x1mL, 10x1mL
10 000 µg/mL in acetone, (5000 µg/mL of each A and B), 1x1mL, 5x1mL, 10x1mL

S-4453-4K-AC

ISO 9377-2 MOD Quality Control Standard of Base Oil EDC 95/11
4000µg/mL in acetone, 1x1mL, 5x1mL, 10x1mL

S-4212-20-5PE
S-4212-20-100PE

ISO 9377-2 Extraction Solvent Stock Solution I
Units: 1x5mL, 5x5mL, 10x5mL extraction solvent stock solution
1x100ml and 5x100mL extraction solvent stock solution

n-Decane	20 µL
n-Tetracontane	20 mg
Pentane	Add to 1000 mL

S-4515

ISO 9377-2 Extraction solvent standard solution.
Dilute of Extraction solvent stock solution (S-4212) 10 times with the extraction solvent (n-Pentane)

S-4134-ASS-10MX

ISO 9377-2 Stearyl Stearate Test Solution
Units: 1x10 mL, 5x10mL, 10x10 mL

Stearyl stearate	200 mg
Extraction solvent standard solution (S-4515)	100 mL

This solution is used to check the efficiency of the clean-up procedure.

S-4213-2K-100MX

ISO 9377-2 Test for Suitability of Fluorisil

2000µg/mL; unit: 1x100mL
Stearyl Stearate in "Extraction solvent standard solution" (S-4515)
Test with stearyl stearate to determine the separation of polar compounds

NEW PRODUCT:
ISO 9377-2 Test for suitability of Fluorosil. Ready to use solution
Units: 1x25mL, 5x25mL, 10x25 mL

Stearyl stearate test solution, 2 mg/mL (S-4134)	10 mL
Extraction solvent (pentane)	15 mL

Total of 25 mL to be used in one experiment

S-4214-2K-PE

ISO 9377-2 Stearyl Stearate Solution for Comparison

Unit: 1mL for direct GC-comparison

Stearyl stearate test solution, 2 mg/mL (S-4134)	0.5 mL
Extraction agent (pentane)	24.5 mL

S-4108-50-PE *
S-4108-50-5PE

ISO 9377-2 Standard Mixture of n-Alkanes C10-C40 (all even)

Determination of Hydrocarbon Oil in Water Index
16 Analytes, each 50 µg/mL in n-Pentane; units: 1x1mL, 1x5mL, 10x1mL

S-4108-100-CY *
S-4108-100-5CY

This standard is also available as 100µg/mL in Cyclohexane
Units: 1x1mL, 1x5 mL, 10x1mL

n-Decane	C10	n-Hexacosane	C26
n-Dodecane	C12	n-Octacosane	C28
n-Tetradecane	C14	n-Triacontane	C30
n-Hexadecane	C16	n-Dotracontane	C32
n-Octadecane	C18	n-Tetratriacontane	C34
n-Eicosane	C20	n-Hexatriaconatne	C36
n-Docosane	C22	n-Octatriacontane	C38
n-Tetracosane	C24	n-Tetracontane	C40

S-4107-50-PE *
S-4107-50-5PE

ISO 9377-2 Standard Mixture of n-Alkanes C20-C40 (all even)

Determination of Hydrocarbon Oil in Water Index
11 Analytes, each 50µg/mL in n-Pentane, units: 1x1mL, 1x5mL, 10x1mL

n-Eicosane	C20	n-Tetratriacontane	C34
n-Docosane	C22	n-Hexatriaconatne	C36
n-Tetracosane	C24	n-Octatriacontane	C38
n-Hexacosane	C26	n-Tetracontane	C40
n-Octacosane	C28		
n-Triaconatne	C30		
n-Dotracontane	C32		

*When using the above standards to check column performance, the relative ratio n-Tetracontane to n-Eicosane should be at least 0.8

ISO 9377-2-Mod: Standards available from Chiron for the determination of hydrocarbon oil index down to C7

S-4215-1ML
S-4215 -5ML

ISO 9377-2 Mixture of Mineral Oils A+B without additives
See above for ISO 9377-2

S-4216-SET

ISO 9377-2 Calibration Mixture of Minerals Oils
See above for ISO 9377-2

S-4453-4K-AC

ISO 9377-2 MOD Quality Control Standard of Base Oil EDC 95/4
4000µg/mL in acetone

S-4217-K-AC
S-4217-4K-AC
S-4217-10K-AC

ISO 9377-2 Quality Control Standard of Mineral Oils A+B
See above for ISO 9377-2

S-4415-20-PE

ISO 9377-2 MOD Extraction Solvent Stock Solution I
20µL of n-Heptane and 20mg of n-Tetracontane solved in 1000mL n-Pentane
Units: 1x5mL, 5x5mL, 10x5mL, 1x100mL and 5x100mL

S-4516

ISO 9377-2 MOD Extraction solvent standard solution.
Dilute of Extraction solvent stock solution (S-4415) 10 times with the extraction solvent (n-Pentane)

S-4517-ASS-10MX

ISO 9377-2 MOD Stearyl Stearate Test Solution
200mg Stearyl stearate in 100mL Extraction solvent standard solution (S-4516)
Units: 1x10mL, 5x10mL, 10x10mL

S-4518-2K-100MX

ISO 9377-2 MOD Test for Suitability of Fluorisil
10mL Stearyl stearate test solution (S-4517) with 15mL Extraction solvent (n-Pentane)
Units: 1x25mL, 5x25mL, 10x25mL, 1x100mL

S-4519-2K-PE

ISO 9377-2 MOD Stearyl Stearate Solution for Comparison
0,5mL Stearyl stearate test solution (S-4517) with 24,5mL Extraction solvent (n-Pentane)
Unit: 1mL for direct GC-Comparison

S-4422-40-100PE

ISO 9377-2 MOD Extraction Solvent Stock Solution II
Units: 1x100mL and 5x100mL extraction solvent stock solution

n-Heptan	40 mg
n-Tetracontane	40 mg
Pentane	Add to 1000 mL

S-4257-200-PE
S-4257-200-5PE

BTEX Mixture 1
6 Analytes, each 200µg/mL in pentane; units: 1x1mL, 1x5mL

Benzene	Ethylbenzene	m-Xylene
Toluene	o-Xylene	p-Xylene

S-4218-2K-PE
S-4218-2K-5PE

BTEX Mixture 2
6 Analytes, each 2000µg/mL in pentane; units: 1x1mL, 1x5mL

Benzene	Ethylbenzene	m-Xylene
Toluene	o-Xylene	p-Xylene

S-4400-10-2ME

BTX Mixture 1

5 Analytes, each 10µg/mL in methanol; unit: 1x2mL screw cap bottle

Benzene	o-Xylene
Toluene	m-Xylene
	p-Xylene

S-4278-50-PE
S-4278-50-5PE

ISO 9377-2 Mod Standard Mixture of n-Alkanes
C7+C8+C9+C10-C40 in n-Pentane

19 Analytes, each 50µg/mL in n-Pentane; units: 1x1mL, 1x5mL, 10x1mL

n-Heptane	C7	n-Tetracosane	C24
n-Octane	C8	n-Hexacosane	C26
n-Nonane	C9	n-Octacosane	C28
n-Decane	C10	n-Triacontane	C30
n-Dodecane	C12	n-Dotriacontane	C32
n-Tetradecane	C14	n-Tetratriacontane	C34
n-Hexanedecane	C16	n-Hexatriacontane	C36
n-Octadecane	C18	n-Octatriacontane	C38
n-Eicosane	C20	n-Tetracontane	C40
n-Docosane	C22		

S-4278-100CY
S-4278-100-5CY

Also available as 100µg/mL in cyclohexane, Units; 1mL, 1x5mL, 10x1mL

S-4423-50-PE
S-4423-50-5PE

ISO 9377-2 Mod Standard Mixture of n-Alkanes + BTEX I
C7+C10+ C20+C40+BTEX in n-Pentane

Determination of Hydrocarbon Oil in Water Index
12 Analytes, each 50µg/mL in n-pentane; units: 1x1mL, 1x5mL, 10x1mL

Benzene	B	p-Xylene	p-X
Toluene	T	n-Heptane	C7
Ethylbenzene	E	n-Decane	C10
o-Xylene	o-X	n-Eicosane	C20
m-Xylene	m-X	n-Tetracontane	C40

S-4424-50-PE
S-4424-50-5PE

ISO 9377-2 Mod Standard Mixture of n-Alkanes + BTEX II
C7+C8+C9+C10+C20+C40+BTEX in n-Pentane

Determination of Hydrocarbon Oil in Water Index
10 Analytes, each 50µg/mL in n-pentane; units: 1x1mL, 1x5mL, 10x1mL

Benzene	B	n-Heptane	C7
Toluene	T	n-Octane	C8
Ethylbenzene	E	n-Nonane	C9
o-Xylene	o-X	n-Decane	C10
m-Xylene	m-X	n-Eicosane	C20
p-Xylene	p-X	n-Tetracontane	C40

S-4395-50-PE
S-4395-50-5PE

ISO 9377-2 Mod Standard Mixture of n-Alkanes + BTEX III
C7+C8+C9+C10-C40 (all even)+BTEX in n-Pentane

Determination of Hydrocarbon Oil in Water Index
25 Analytes, each 50µg/mL in n-pentane; units: 1x1mL, 1x5mL, 10x1mL

Benzene	B	n-Octadecane	C18
Toluene	T	n-Eicosane	C20
Ethylbenzene	E	n-Docosane	C22
o-Xylene	o-X	n-Tetracosane	C24
m-Xylene	m-X	n-Hexacosane	C26
p-Xylene	p-X	n-Octacosane	C28
n-Heptane	C7	n-Triacontane	C30
n-Octane	C8	n-Dotriacontane	C32
n-Nonane	C9	n-Tetratriacontane	C34
n-Decane	C10	n-Hexatriacontane	C36
n-Dodecane	C12	n-Octatriacontane	C38
n-Tetradecane	C14	n-Tetracontane	C40
n-Hexanedecane	C16		

Other n-Alkane solutions available from Chiron

(See also the Petroleum section page 186-189)

S-4106-100-CY	n-Alkanes, C10-C40 (all even+pristane/phytane), 18 Analytes
S-4109-50-CY -100-CY	n-Alkanes, C10-C40 (all even and uneven), 31 Analytes
S-4110-100-CY	n-Alkanes, C10-C40 (all even and uneven+pristane/phytane), 33 Analytes
S-4066-K-IO	n-Alkanes, C14-C32 (all even+pristane/phytane), 12 Analytes
S-4075-100-DCM	n-Alkanes, C10-C40 (all even+unevenC15-27+pristane/phytane), 24 Analytes

ISO 10382:2002
Soil quality - Organochlorine pesticides and PCBs

Soil quality - Determination of organochlorine pesticides and polychlorinated biphenyls – Gas chromatographic method with electron capture detection

This International standard specifies a method for the quantitative determination of seven polychlorinated biphenyls and seventeen organochlorine pesticides in soil.

Chiron No.	Compound	Abbr.	CAS No	Conc. 1 mL
	Polychlorinated biphenyls			
1999.12-100-IO	2,4,4'-Trichlorobiphenyl	PCB-28	7012-37-5	100 µg/mL
2000.12-100-IO	2,2',5,5'-Tetrachlorobiphenyl	PCB-52	35693-99-3	100 µg/mL
2001.12-100-IO	2,2',4,5,5'-Pentachlorobiphenyl	PCB-101	37680-73-2	100 µg/mL
2002.12-100-IO	2,3',4,4'5-Pentachlorobiphenyl	PCB-118	31508-00-6	100 µg/mL
2003.12-100-IO	2,2',3,4,4',5'-Hexachlorobiphenyl	PCB-138	35065-28-2	100 µg/mL
2004.12-100-IO	2,2',4,4',5,5'Hexachloirobiphenyl	PCB-153	35065-27-1	100 µg/mL
2005.12-100-IO	2,2'3,4,4',5,5'-Heptachlorobiphenyl	PCB-180	35065-29-3	100 µg/mL
	Organochlorine pesticides			
1356.6-100-CY or AN	Hexachlorobenzene	HCB	118-74-1	100µg/mL
3319.6-100-CY or AN	α-Hexachlorocyclohexane	α-HCH	319-84-6	100µg/mL
3415.6-100-CY or AN	β-Hexachlorocyclohexane	β-HCH	319-85-7	100µg/mL
2026.6-100-CY or AN	γ-Hexachlorocyclohexane (Lindane)	γ-HCH	58-89-9	100µg/mL
2775.12-100-CY or AN	Aldrin		309-00-2	100µg/mL
2775.12-100-CY or AN	Dieldrin		60-57-1	100µg/mL
1892.12-100-CY or AN	Endrin		72-20-8	100µg/mL
2776.10-100-CY or AN	Heptachlor		76-44-8	100µg/mL
2778.10-100-CY or AN	Heptachloro epoxide (exo-, cis-)	A-isomer	28044-83-9	100µg/mL

2771.10-100-CY or AN	Heptachloro epoxide (endo-, trans-)	B-isomer	1024-57-3	100µg/mL
3387.9-100-CY or AN	α-Endosulfan		959-98-8	100µg/mL
3362.14-100-CY or AN	p,p'-DDE		72-55-9	100µg/mL
3357.14-100-CY or AN	o,p'-DDD		53-19-0	100µg/mL
3363.14-100-CY or AN	o,p'-DDT		789-02-6	100µg/mL
3356.14-100-CY or AN	p,p'-DDD		72-54-8	100µg/mL
3361.14-100-CY or AN	o,p'-DDE		3424-82-6	100µg/mL
2028.14-100-CY or AN	p,p'-DDT		50-29-3	100µg/mL
	Injection standards			
3308.12-100-IO	2,2',4,4',6,6-Hexachlorobiphenyl	PCB-155	33979-03-2	100 µg/mL
3252.12-100-IO	2,2',3,4,5,6'-Hexachlorobiphenyl	PCB-143	68194-15-0	100 µg/mL
3604.12-100-IO	2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	PCB-207	52663-79-3	100 µg/mL

S-4236-10-IO **ISO 10382 Multicomponent Stock Solution of PCBs**

S-4236-100-IO "Dutch Seven" PCBs in isooctane, 10µg/mL each, 1x1ml, 5x1ml, 10x1ml

S-4236-200-IO 100µg/mL each, 1x1ml, 5x1 ml, 10x1 ml
200µg/mL each, 1x1ml, 5x1 ml, 10x1 ml

S-4457-400-IO **ISO 10382 Multicomponent Solution of PCBs and Organochlorine pesticides**

PCBs and pesticides as listed above, each 400µg/mL in isooctane; unit: 1x1ml

S4458-400-IO **ISO 10382 Multicomponent Solution of PCBs and Organochlorine pesticides + injection standards**

PCBs and pesticides as listed above + injection standards 3308.12 and 3604.12, each 400µg/mL in isooctane; unit: 1x1mL

ISO 12078, IDF 159:2006 Sterols in milk fat

NEW

Anhydrous milk fat – Determination of sterol composition by gas liquid chromatography (Reference method)

This International Standard specifies a gas liquid chromatography reference method for the determination of the sterol composition of anhydrous milk fat extracted from diary products.

1583.30-600-DI	Betulin, Internal Standard Solution 600µg/mL in di-isopropyl ether	1x1mL, 1x10mL, 5x10mL
2900.27-600-10HX	Cholesterol standard solution 600µg/mL in n-hexane	1x1mL, 1x10mL
3919.28-100-HX	Campesterol standard solution 100µg/mL in n-hexane	1x1mL, 5x1mL
3767.29-100-HX	Stigmasterol standard solution 100µg/mL in n-hexane	1x1mL, 5x1mL
2732.29-100-HX	β-Sitosterol standard solution 100µg/mL in n-hexane	1x1mL, 5x1mL

S-4487 **Sterol standard mixture for ISO 12078**

Neat mixture in 1mL sealed ampoule (Ref 9.1.2) for qualitative analysis after silylation

2900.27	Cholesterol	600µg
3919.28	Campesterol	100µg
3767.29	Stigmasterol	100µg
2717.29	Sitosterol	100µg
1583.30	Betulin (IS)	600µg

Silylating agents

1940.3-5ML	Trimethylchlorosilane
1943.6-10ML	Hexamethyldisiazane

ISO 12228:1999
Sterols in animal and vegetable fats and oil

NEW

Animal and vegetable fats and oils – Determination of individual and total sterols contents – Gas Chromatographic method

This International Standard specifies a method for gas chromatographic determination of the contents and compositions of sterols in animal and vegetable fats and oils.

1583.30-K-AC
1583.30-K-10AC
Betulin, Internal standard solution
1.0 mg/mL in acetone; units: 1x1mL, 1x10mL

2795.30-K-AC
2795.30-K-10AC
5α-Cholestan-3β-ol (Cholestanol), Alternative internal standard
1.0 mg/mL in acetone; units: 1x1mL, 1x10mL

S-4498-ASS-AC **Standard solution for TLC, ISO 12228**

2 Analytes, each concentration as listed in acetone; unit: 1x1mL

2900.27	Cholesterol	1mg/mL
1583.30	Betutin	5mg/mL

Silylating agent

3916.8-1ML	N-methyl-N-(trimethylsilyl)-heptafluorobutyramide (MSHFBA)

S-4499-50-IO **Identification mixture for sterols**

10 Analytes, each 50µg/mL in isooctane; unit: 1x1mL

2900.27	Cholesterol
2795.27	Cholestanol
2734.28	Brassicasterol
3913.28	Champesterol
3767.29	Stigmasterol
2732.29	Sitosterol
2717.29	Sitostanol
3915.30	Erythodiol
1681.30	Uvaol
1583.30	Betulin

ISO 13877:1998
Soil quality - 16 PAHs by HPLC

Soil quality - Determination of polynuclear aromatic hydrocarbons - Method using high-performance liquid chromatography

This standard describes two methods for quantification of ploynuclear aromatic hydrocarbons (PAH) in soil.

S-4459-50-AN **ISO 13877 Standard stock solution**

16 Analytes, each 50µg/mL in acetonitrile; unit: 1x1.1mL

0711.10	Naphthalene	[91-20-3]
0002.12	Acenaphthylene	[208-96-8]
0732.12	Acenaphthene	[83-32-9]
0217.13	Fluorene	[86-73-7]
0816.14	Phenanthrene	[85-01-8]
1049.14	Anthracene	[120-12-7]
0260.16	Fluoranthene	[206-44-0]
0235.16	Pyrene	[129-00-0]
0201.18	Benzo[a]anthracene	[56-55-3]
0212.18	Chrysene	[218-01-9]
0263.20	Benzo[b]fluoranthene	[205-99-2]
0265.20	Benzo[k]fluoranthene	[207-08-9]
0239.20	Benz[a]pyrene	[50-32-8]
0203.22	Dibenzo[a,h]anthracene	[53-70-3]
0222.22	Benz[ghi]perylene	[191-24-2]
0277.22	Indeno[1,2,3-cd]pyrene	[193-39-5]

ISO 14154:2005
Soil quality – Phenols by GC-ECD

Soil quality - Determination of some selected chlorophenols – Gas Chromatographic method with electron-capture detection

The method describes the gas chromatographic determination of 15 chlorophenols (2,3-, 2,4-, 2,5-, 2,6-, 3,4-, and 3,5-dichlorophenol; 2,3,4-, 2,3,5-, 2,3,6-, 2,4,5-, 2,4,6-, and 3,4,5-trichlorphenol; 2,3,4,5- and 2,3,4,6-tetra-chlorophenol and pentachlorophenol) in soil samples. This method can also be applied to other solid samples such as sediments and solid wastes.

The method provides a procedure for solid/liquid extraction and purification based on successive extractions in basic and acidic aqueous media and hexane. Finally the chlorophenols are derivatized with acetic anhydride and analyzed by gas chromatography with electron capture or mass detection.

S-4361 **2,4,6-Tribromophenol, Internal Standard Stock Solution**

1.148 mg/mL, in ethanol, 5mL

Alternative Internal Standards:

S-4362 **2,4-Dibromophenol, Internal Standard Stock Solution**

S-4363 **2,6-Dibromophenol, Internal Standard Stock Solution**

S-4364-ASS-ET

Chlorophenol Standard, Stock Solution

15 Analytes, each concentration as listed in ethanol; unit: 5x1mL

2066.6	2,3-Dichlorophenol	[576-24-9]	400 µg/mL
2064.6	2,4-Dichlorophenol	[120-83-2]	400 µg/mL
2065.6	2,5-Dichlorophenol	[583-78-8]	400 µg/mL
2069.6	2,6-Dichlorophenol	[87-65-0]	400 µg/mL
2080.6	3,4-Dichlorophenol	[95-77-2]	400 µg/mL
2078.6	3,5-Dichlorophenol	[591-35-5]	400 µg/mL
2077.6	2,3,4-Trichlorophenol	[15950-66-0]	400 µg/mL
2073.6	2,3,5-Trichlorophenol	[933-78-8]	400 µg/mL
2072.6	2,3,6-Trichlorophenol	[933-75-5]	400 µg/mL
2075.6	2,4,5-Trichlorophenol	[95-95-4]	400 µg/mL
2076.6	2,4,6-Trichlorophenol	[88-06-2]	600 µg/mL
2082.6	3,4,5-Trichorophenol	[609-19-8]	200 µg/mL
2081.6	2,3,4,5-Tetrachlorophenol	[4901-51-3]	200 µg/mL
2149.6	2,3,4,6-Tetrachlorophenol	[58-90-2]	600 µg/mL
2084.6	Pentachlorophenol	[87-86-5]	1000 µg/mL

ISO 15009:2002
Soil quality – Volatile compounds by GC/purge-and-trap

Soil quality - Gas chromatographic determination of the content of volatile aromatic hydrocarbons, naphthalene and volatile halogenated hydrocarbons – Purge-and-trap method with thermal desorption

This International Standards specifies a method for quantitative gas-chromatographic determination of volatile hydrocarbons, naphthalene and volatile hydrocarbons in all types of soil.

S-4460-2K-5ME

ISO 15009 Stock internal standard solution for aromatic hydrocarbons

2 Analytes, each 2000µg/mL in methanol; unit: 1x5mL

2253.7	Toluene-d8	[2037-26-5]
2171.8	Ethylbenzene-d10	[25837-05-2]

S-4461-2K-5ME

ISO 15009 Stock internal standard solution for volatile halogenated hydrocarbons

3 Analytes, each 2000µg/mL in methanol; unit: 1x5mL

3932.4	1,4-Dichlorobutane	[110-56-5]
2048.7	α,α,α-Trifluorotoluene	[98-08-8]
3933.6	2-Bromofluorobenzene	[1072-85-1]

S-4462-4K-5ME

ISO 15009 Volatile aromatic hydrocarbons

8 Analytes, each 4000µ/mL in methanol; unit: 1x5mL

1300.6	Benzene	[71-43-2]
1264.7	Toluene	[108-88-3]
1268.8	Ethylbenzene	[100-41-4]
1267.8	o-Xylene	[95-47-6]
1266.8	m-Xylene	[108-38-3]
1265.8	p-Xylene	[106-42-3]
2558.8	Styrene	[100-42-5]
0711.10	Naphthalene	[91-20-3]

S-4463-4K-5ME

ISO 15009 Volatile halogenated hydrocarbons

18 Analytes, each 4000µg/mL in methanol; unit: 1x5mL

2554.1	Dichloromethane	[75-09-2]
1350.1	Trichloromethane	[67-66-3]
1352.1	Tetrachloromethane	[56-23-5]
3929.2	1,1-Dichloroethane	[75-34-3]
1355.2	1,2-Dichloroethane	[107-06-2]
1351.2	1,1,1-Trichloroethane	[79-01-6]
3934.2	1,1,2-Trichloroethane	[79-00-5]
3935.3	1,2-Dichloropropane	[78-87-5]
3936.3	1,2,3-Trichloropropane	[98-18-4]
3937.3	cis-1,3-Dichloropropene	[10061-01-5]
3938.3	trans-1,3-Dichloropropene	[10061-02-6]
3939.2	cis-1,2-Dichloroethene	[156-59-2]
3940.2	trans-1,2-Dichloroethene	[156-60-5]
3941.3	3-Chloropropene	[107-05-1]
1354.2	Trichloroethene	[79-01-6]
1353.2	Tetrachloroethene	[127-18-4]
2273.6	Monochlorobenzene	[108-90-7]
3364.6	1,2-Dichlorobenzene	[95-50-1]

ISO 15680:2003
Water quality – Volatile compounds by GC/purge-and-trap

Water quality - Gas-chromatographic determination of a number of monocyclic aromatic hydrocarbons, naphthalene and several chlorinated compounds using purge-and-trap and thermal desorption.

This International Standard specifies a general method for the determination of volatile organic compounds (VOCs) in water by purge-and-trap isolation and gas chromatography (GC).

S-4464-2K-5ME

ISO 15680 Stock internal standard solution

4 Analytes, each 2000µg/mL in methanol; unit: 1x5mL

2017.6	Fluorobenzene	[462-06-6]
3942.6	1,4-Difluorobenzene	[540-36-3]
3943.6	Monochlorobenzene-d5	[3114-55-4]
1957.6	1,4-Dichlorobenzene-d4	[3855-82-1]

S-4465-2K-5ME

ISO 15680 Stock calibration standard solution 1

14 Analytes to be used with Internal standard S1, each 2000µg/mL in methanol; unit: 1x5mL

3944.1	Dichlorodifluoromethane	[75-71-8]
3945.1	Monochloromethane	[75-87-3]
3946.1	Monobromomethane	[74-83-9]
3947.2	Monochlorethane	[74-87-3]
2260.1	Trichlorofluoromethane	[75-69-4]
2260.2	1,1-Dichloroethene	[75-35-4]
2554.1	Dichloromethane	[75-09-2]
3940.2	trans-1,2-dichloroethene	[156-09-2]
3929.2	1,1-Dichloroethane	175-34-3]
3951.3	2,2-Dichloropropane	[544-16-1]
3939.2	cis-1,2-dichloroethene	156-59-2]
3950.1	Bromochloromethane	[74-47-5]
1350.1	Trichloromethane	[66-67-3]
1351.2	1,1,1-Trichloroethane	[110-82-7]

S-4466-2K-5ME

ISO 15680 Stock calibration standard solution 2

12 Analytes to be used with Internal standard S2, each 2000µg/mL in methanol; unit: 1x5mL

1352.1	Tetrachloromethane	[56-23-5]
3952.3	1,1-Dichloropropene	[563-58-6]
1300.6	Benzene	[71-43-2]
1355.2	1,2-Dichloroethane	[107-06-2]
1354.2	Trichloroethene	[79-01-6]
3935.3	1,2-Dichloropropane	[78-87-6]
3953.1	Dibromomethane	[74-95-1]
1690.1	Bromodichloromethane	[75-27-4]
3938.3	trans-1,3-dichloropropene	[10061-02-6]
1264.7	Toluene	[108-88-1]
3937.3	cis-1,3-Dichloropropene	[10061-01-5]
3934.2	1,1,2-Trichloroethane	[79-00-5]
2256.2	1,2-Dibromoethane	[106-93-4]

S-4467-2K-5AN

ISO 15680 Stock calibration standard solution 3

11 Analytes to be used with Internal standard S3, each 2000µg/mL in methanol; unit: 1x5mL

1352.1	Tetrachloroethene	[56-23-5]
3954.3	1,3-Dichloropropane	[142-28-9]
1691.1	Dibromochloromethane	[124-48-1]
2273.6	Monochlorobenzene	[108-90-7]
3955.2	1,1,1,2-Tetrachlorethane	[630-20-6]
1268.8	Ethylbenzene	[100-41-4]
1266.8	m-Xylene	[108-38-3]
1265.8	p-Xylene	[106-42-3]
1267.8	o-Xylene	[95-47-6]
2558.8	Styrene	[100-42-5]
1689.1	Tribromomethane	[75-25-1]

S-4468-2K-5ME

ISO 15680 Stock calibration standard solution 4

22 Analytes to be used with Internal standard S1, each 2000µg /mL in methanol; unit: 1x5mL

2155.9	Isopropylbenzene	[98-82-8]
2157.6	Monobromobenzene	[106-86-1]
3957.2	1,1,2,2-Tetrabromoethane	[79-27-6]
3936.3	1,2,3-Trichloropropane	[96-18-4]
1298.9	n-Propylbenzene	[103-65-1]
3959.7	2-Chlorotoluene	[95-49-8]
3960.7	4-Chorotoluene	[106-43-4]
1269.9	1,3,5-Trimethylbenzene	[108-67-8]
2343.10	tert-Butylbenzene	[98-06-6]
1270.9	1,2,4-Trimethylbenzene	[95-63-6]
2341.10	sec-Butylbenzene	[135-98-8]
3365.6	1,3-Dichlorobenzene	[541-73-1]
3366.6	1,4-Dichlorobenzene	[106-46-7]
0924.10	4-Isopropyltoluene	[99-87-6]
3364.6	1,2-Dichlorobenzene	[95-50-1]
0392.10	n-Butylbenzene	[104-51-8]
3963.3	1,2-Dibromo-3-chloropropane	[96-12-8]
3519.6	1,2,4-Trichlorobenzene	[120-82-1]
2027.4	Hexachlorobutadiene	[87-68-3]
0711.10	Naphthalene	[91-20-3]
3330.6	1,2,3-Trichlorobenzene	[87-61-6]
3749.6	1,3,5-Trichlorobenzene	[108-70-3]

ISO 15753:2006
PAHs in animal and vegetable fats and oils

NEW

Animal and vegetable fats and oils – Determination of polycyclic aromatic hydrocarbons

This International Standard describes two methods for the determination of 15 polycyclic aromatic hydrocarbons in animal and vegetable fats and oils. The quantification limit is 0.2µg/kg for all compounds, except fluoranthene and benzo[ghi]perylene where the limit is 0.3µg/kg and indeno[1,2,3-cd]pyrene where the limit is 1µg/kg.

S-4469-100-T

ISO 15753 Multiple compound standard solution

15 Analytes, each 100µg/mL in toluene; unit: 1x1mL

0711.10	Naphthalene	[91-20-3]
0732.12	Acenaphthene	[83-32-9]
0217.13	Fluorene	[86-73-7]
0816.14	Phenanthrene	[85-01-8]
1049.14	Anthracene	[120-12-7]
0260.16	Fluoranthene	[206-44-0]
0235.16	Pyrene	[129-00-0]
0201.18	Benzo[a]anthracene	[56-55-3]
0212.18	Chrysene	[218-01-9]
0263.20	Benzo[b]fluoranthene	[205-99-2]
0265.20	Benzo[k]fluoranthene	[207-08-9]
0239.20	Benzo[a]pyrene	[50-32-8]
0203.22	Dibenzo[a,h]anthracene	[53-70-3]

0222.22	Benz[ghi]perylene	[191-24-2]
0277.22	Indeno[1,2,3-cd]pyrene	[193-39-5]

S-4469-200-5AN **ISO 15753 Multiple compound stock standard solution**
15 analytes, each 200ng/mL in acetonitrile; unit: 1x5mL

S-4469-50-5MX **ISO 15753 Multiple compound working standard solution**
15 analytes, each 50ng/mL in acetonitrile/THF/methanol; unit: 1x5mL

Alternatively: Standard solution of 16 EPA-PAHs may be used, but this mixture also contain acenaphtene

S-4470-100-T EPA 100µg each/mL in toluene; unit: 1x1mL

ISO 15788-2:2006 Animal and vegetable fats and oils – Determination of stigmastadienes in vegetable oils

NEW

Part 2: Method using high-performance liquid chromatography (HPLC)

This part of ISO 15788 specifies a method for the determination of steradienes, especially stigmastadienes. Steradienes are formed by dehydration of sterols during bleaching and also partially during steam washing and deodorization. The method is also suitable as a screening method to detect the presence of refined vegetable oils in virgin oils such as olive oil.

Δ3,5-Cholestadiene stock solution
1mg/mL in tert-butyl methyl ether
Δ3,5-Cholestadiene External standard solution
10µg/mL (0.01µg/µL) in acetonitrile/ tert-butyl methyl ether 1:1
Δ3,5-Cholestadiene Internal standard solution
2µg/mL in petroleum ether
5α-Cholestane standard solution for GC
1mg/mL in isooctane

Reference standards for cholesta-, campesta- and stigmastadienes and stigmastatriene

0678.27-100-IO	Cholestadiene
0686.27-100-IO	Stigmastatriene
0682.28-200-IO	Campestadiene and Stigmastadiene

ISO 17353:2004
Organotin compounds in water

NEW

Water quality - Determination of selected organotin compounds – Gas Chromatographic method

This International Standard specifies a method for the identification and quantification of organotin compounds and/or cation in drinking water, surface water and wastewater.

The principle is alkylation of the organotin compounds in water with sodium tetraethylborate and extraction with hexane. The tetrasubstituted organotin compounds are separated by GC and detected by Mass spectrometry, FPD or AED.

S-4380-K-5ME

ISO 17353/23161 Multicomponent OC* Standard Solution, Stock Solution A

8 Analytes, each 1000µg/mL OC in methanol; units: 5x1mL, 5x5mL

* OC: Organotin cation

OCT: Organotin compound

Prod.No.	Compound	CAS No.	Weight OCT
1983.4	Mono-n-butyltin trichloride	[1118-46-3]	1605 µg/mL
1982.8	Di-n-butyltin dichloride	[683-18-1]	1304 µg/mL
1981.12	Tri-n-butyltin chloride	[1461-22-9]	1122 µg/mL
2497.16	Tetra-n-butyltin	[1461-25-2]	1000 µg/mL
2487.8	Mono-n-octyltin trichloride	[3091-25-6]	1458 µg/mL
2488.16	Di-n-octyltin dichloride	[3542-36-7]	1205 µg/mL
1985.18	Triphenyltin chloride	[639-58-7]	1101 µg/mL
2489.18	Tricyclohexyltin chloride	[3091-32-5]	1096 µg/mL

S-4381-K-ME

S-4381-K-5ME

ISO 17353/23161 Internal Standard OC, Stock Solution B

4 Analytes, each 1000µg/mL OC in methanol; units: 5x1mL, 5x5mL

Prod.No.	Compound	CAS No.	Weight OCT
2496.14	Di-n-heptyltin dichloride	[74340-12-8]	1224 µg/mL
2495.7	Mono-n-heptyltin trichloride	[59344-47-7]	1488 µg/mL
1989.9	Tri-n-propyltin chloride	[2279-76-7]	1143 µg/mL
2490.12	Tetra-n-propyltin	[2176-98-9]	1000 µg/mL

ISO 17495:2001
Water quality - Nitrophenols by GC-MS

Water quality - Determination of selected nitrophenols - Method by solid phase extraction and gas chromatography with mass spectrometric detection

This international method specifies a method for the determination of selected nitrophenols in drinking water, ground water and surface water.

The method provides a procedure for solid-phase extraction of nitrophenols, followed by solvent elution, derivatization with diazomethane and determination by gas chromatography and mass spectrometry.

S-4357-500-AC

ISO 17495 Methylated Phenols Stock Solution,
14 Analytes, each 500µg/mL in acetone; units: 5x1mL

Prod.No.	Compound	CAS No.
2442.7	2-Nitroanisole	[91-23-6]
2443.7	3-Nitroanisole	[555-03-3]
2444.7	4-Nitroanisole	[100-17-4]
2448.8	4-Methyl-2-nitroanisole	[119-10-8]
2447.8	3-Methyl-4-nitroanisole	[5367-32-8]
2449.8	3-Methyl-2-nitroanisole	[5345-42-6]
2450.8	5-Methyl-2-nitroanisole	[38512-82-2]
2451.7	2,4-Dinitroanisole	[119-27-7]
2452.7	2,5-Dinitroanisole	[3962-77-4]
2453.7	2,6-Dinitroanisole	[3535-67-9]
2454.8	2,4-Dinitro-6-methylanisole	[29027-13-2]
2455.7	2,6-Dichloro-4-nitroanisole	[17742-69-7]
2456.7	2,4-Dichloro-6-nitroanisole	[37138-82-2]
2457.9	2,6-Dimethyl-4-nitroanisole	[14804-39-8]

S-4358-500-AC

ISO 17495 Nonmethylated Phenols Stock Solution,
14 Analytes, each 500µg/mL in acetone; units: 5x1mL

Prod.No.	Compound	CAS No.
2085.6	2-Nitrophenol	[88-75-5]
2086.6	3-Nitrophenol	[554-84-7]
2087.6	4-Nitrophenol	[100-02-7]
2458.7	4-Methyl-2-nitrophenol	[119-33-5]
2459.7	3-Methyl-4-nitrophenol	[2581-34-2]
2460.7	5-Methyl-2-nitrophenol	[700-38-9]
2461.7	3-Methyl-2-nitrophenol	[4920-77-8]
2079.6	2,4-Dinitrophenol	[51-28-5]
2462.6	2,5-Dinitrophenol	[329-71-5]
2463.6	2,6-Dinitrophenol	[573-56-8]
2083.7	2,4-Dinitro-6-methylphenol	[534-52-1]
2465.6	2,6-Dimethyl-4-nitrophenol	[2423-71-4]
2466.6	2,4-Dichloro-6-nitrophenol	[609-89-2]
2467.6	2,6-Dichloro-4-nitrophenol	[618-80-4]

S-4359-10-5AC

ISO 17495 Internal Standard Stock Solution
2 Internal standards, each 10µg/mL in acetone; unit: 1x5mL

2061.6	2,4-Dibromophenol	[615-58-7]
2060.6	2,4,6-Tribromophenol	[118-79-6]

The following compounds are suggested as alternative Internal Standards for this method:

2061.6	2,4-Dibromophenol	[615-58-7]
2472.6	2,6-Dibromophenol	[608-33-3]

Deuterated or ^{13}C-labelled substances

ISO 17858:2007
Water quality - Dioxin-like PCBs

NEW

Water quality - Determination of dioxin-like polychlorinated biphenyls – Method using gas chromatography/mass spectrometry

This International Standard specifies a method for the determination of tetra- to hepta- dioxin-like polychlorinated Biphenyls (PCBs) in waters and waste waters using high resolution gas chromatography/high resolution mass spectrometry (HRGC/HRMS). The method is optimized for dioxin-like PCBs, but may include other co-planar compounds as Polychlorinated Dioxins and Furans.

S-4471-20-NO

Precition and recovery (PAR) standard solution

Dioxin-like PCBs each in 20ng/mL solution in n-nonane; unit: 1x1mL

Chiron No.	Dioxin-like PCBs	PCB No.	CAS No.
2006.12	3,3'4,4'-TetraCB	PCB-77	[32598-13-3]
2007.12	3,4,4',5-TetraCB	PCB-81	[70362-50-4]
2008.12	2,3,3',4,4'-PentaCB	PCB-105	[32598-14-4]
2009.12	2,3,4,4',5-PentaCB	PCB-114	[74472-37-0]
2011.12	2',3,4,4',5-PentaCB	PCB-123	[65510-44-3]
2012.12	3,3',4,4',5-PentaCB	PCB-126	[57465-28-8]
2013.12	2,3,3',4,4',5-HexaCB	PCB-156	[38380-08-4]
2014.12	2,3,3',4',5'-HexaCB	PCB-157	[69782-90-7]
2015.12	2,3',4,4',5,5'-HexaCB	PCB-167	[52663-72-6]
2220.12	3,3,4,4',5,5'-HexaCB	PCB-169	[32774-16-6]
2267.12	2,2',3,4,4'5-HeptaCB	PCB-170	[35065-30-6]
2005.12	2,2',3,3',4,4',5,5'-HeptaCB	PCB-180	[35065-29-3]
2016.12	2,3,3',4,4',5,5'-HeptaCB	PCB-189	[39635-31-9]

S-4472-20-NO

Labelled –compound spiking solution

Dioxin-like F-PCBs each in 20ng/mL solution in n-nonane; unit: 1x1mL

Chiron No.	Dioxin-like IS, FluoroPCBs	PCB No.
2863.12	5-F-3,3',4,4'-TetraCB	F-PCB-77
2344.12	3'-F-3,4,4',5-TetraCB	F-PCB-81
2864.12	5'-F-2,3,3',4,4'-PentaCB	F-PCB-105
2870.12	3'-F-2,3,4,4',5-PentaCB	F-PCB-114
2866.12	5'-F-3,3',4,4',5-PentaCB	F-PCB-126
2871.12	5'-F-2,3,3',4,4',5-HexaCB	F-PCB-156
2746.12	3'-F-2,3,4,4',5,6-HexaCB	F-PCB-166 (PCB-167,169)
3730.12	5'-F-2,3,3',4,4',5,6-HeptaCB	F-PCB-190 (PCB-189)

Single F-labelled compounds are available in concentrations 10-100μg/mL in isooctane.
Single native compounds are available in concentrations 100μg/mL in isooctane.

ISO 17993:2002
Water quality – 15 PAHs by HPLC

Water quality - Determination of 15 polycyclic aromatic hydrocarbons (PAH) in water by HPLC with fluorescence detection after liquid-liquid extraction

This International Standard specifies a method using high performance liquid chromatography (HPLC) with fluorescence detection after liquid-liquid extraction for the determination of 15 selected PAH in drinking water and ground water in mass concentrations greater than 0.005µg/L (for each single compound) and surface water in mass concentrations above 0.01µg/L.

S-4473-10-AN

ISO 17993 Multiple compound stock solution
15 Analytes, each 10µg/mL in acetonitrile; unit: 1x1mL

0711.10	Naphthalene	[91-20-3]
0732.12	Acenaphthene	[83-32-9]
0816.14	Phenanthrene	[85-01-8]
0260.16	Fluoranthene	[206-44-0]
0201.18	Benzo[a]anthracene	[56-55-3]
0263.20	Benzo[b]fluoranthene	[205-99-2]
0239.20	Benz[a]pyrene	[50-32-8]
0203.22	Dibenzo[a,h]anthracene	[53-70-3]
0217.13	Fluorene	[86-73-7]
1049.14	Anthracene	[120-12-7]
0235.16	Pyrene	[129-00-0]
0212.18	Chrysene	[218-01-9]
0265.20	Benzo[k]fluoranthene	[207-08-9]
0277.22	Indeno[1,2,3-cd]pyrene	[193-39-5]
0222.22	Benz[ghi]perylene	[191-24-2]

Additional compound:

0297.19	6-Methylchrysene	[1705-85-7]

0297.19-10-AN 10 µg/mL in acetonitrile, 1 mL

ISO 18252, IDF 200:2006
Sterols in milk fat by GC

NEW

Anhydrous milk fat – Determination of sterol composition by gas liquid chromatography (Routine method)

This Internal Standard specifies a routine gas liquid chromatography method for the determination of the sterol composition in anhydrous milk fat extracted from dairy products directly on the unsaponifiable matter, without purification and derivatization.

0622.27-600-HX 0622.27-600-10HX	5α-Cholestane (99+%), Internal standard solution 600µg/mL in n-hexane/ethanol (1:10) or n-hexane	1x1mL, 1x10mL
2900.27-600-HX 2900.27-600-10HX	Cholesterol (99+%) standard solution 600µg/mL in n-hexane	1x1mL, 1x10mL

3913.28-100-HX	Campesterol standard solution 100µg/mL in n-hexane	1x1mL, 5x1mL
3737.29-100-HX	Stigmasterol standard solution 100µg/mL in n-hexane	1x1mL, 5x1mL
2732.29-100-HX	β-Sitosterol standard solution 100µg/mL in n-hexane	1x1mL, 5x1mL

S-4494 **Sterol standard mixture for ISO 18252**
For Qualitative analysis, neat in 1mL sealed ampoulle

2900.27	Cholesterol	600µg
3913.28	Campesterol	100µg
3767.29	Stigmasterol	100µg
2732.29	Sitosterol	100µg
1583.30	5α-Cholestane (IS)	600µg

Dissolve in 0.25 mL n-hexane for split injector or 3mL for on-column injector

ISO 18857-1: 2005
Water quality - Alkylphenols by GC-MS

Water quality - Determination of selected alkylphenols

Part 1: Method for non-filtered samples using liquid-liquid extraction and gas chromatography with mass selective detection

This method specifies a method for the determination of 4-nonylphenol (mixture of isomers) and 4-(1,1,3,3-tetramethylbutyl)phenol in non-filtered samples of drinking water, ground water and surface water.

The method provides procedures for the determination of phenols in finished drinking water. This method can also be used on untreated course water and other types of water samples. A large variety of phenols can be determined by this method.

S-4376-1-5AC **ISO 18857-1 4-n-Nonylphenol (ring13C6), Internal standard**
1 ng/µL, in acetone, 5 mL

2414.15-1-5AC **ISO 18857-1 4-n-Nonylphenol-2,3,5,6-d4, Alternative Int. standard**
1 ng/µL, in acetone, 5 mL

S-4377-1-5T **ISO 18857-1 4-n-Nonylphenol solution, Calibration standard**
1 ng/µL, in toluene, 5 mL =1450.15-1-5T

S-4378-1-5T **ISO 18857-1 4-(1,1,3,3-Tetramethylbutyl)phenol solution, Calibration standard**
1 ng/µL, in toluene, 5 mL =1446.14-1-5T

ISO 22032:2006
Water quality - PBDEs by GC-MS

NEW

Determination of selected polybrominated diphenyl ethers in sediment and sewage sludge –Method using extraction and gas chromatography/mass spectrometry.

This International standard specifies a method for the determination of selected polybrominated diphenylethers (PBDE) in sediment and sludge using GC and mass spectrometry (GC-MS) in the electron impact (EI) or negative ion chemical ionization (NCI) mode.

ISO 22032 Solutions of single reference substances / internal standards (§5.7):

Chiron No.	Compound	Abbr.	Conc.
	Natives		
1962.12-50-T	2,2',4,4'-Tetrabromodiphenylether	PBDE-47	50 µg/mL
1967.12-50-T	2,2',4,4',5-Pentabromodiphenylether	PBDE-99	50 µg/mL
1968.12-50-T	2,2',4,4',6-Pentabromodiphenylether	PBDE-100	50 µg/mL
1971.12-50-T	2,2',4,4',5,5'-Hexabromodiphenylether	PBDE-153	50 µg/mL
1972.12-50-T	2,2',4,4',5,6'-Hexabromodiphenylether	PBDE-154	50 µg/mL
1973.12-50-T	2,2',3,4,4',5',6-Heptabromodiphenylether	PBDE-183	50 µg/mL
2647.12-50-T	2,3,3'4,4',5,5',6-Octabromodiphenylether	PBDE-205	50 µg/mL
1811.12-50-T	Decabromodiphenylether	PBDE-209	50 µg/mL
	Internal Standards F-PBDEs®		
2161.12-50-T	6-Fluoro-2,2',4,4'-tetrabromodiphenylether	F-PBDE-47	50 µg/mL
2506.12-50-T	5,5'-Difluoro-2,2',4,4'-tetrabromodiphenylether	2F-PBDE-47	50 µg/mL
2505.12-50-T	3,6-Difluoro-2,2',4,4'5-pentabromodiphenylether	2F-PBDE-99	50 µg/mL
2163.12-50-T	3-Fluoro-2,2'4,4',6-pentabromodiphenylether	F-PBDE-100	50 µg/mL
1929.12-50-T	4'-Fluoro-2,3,3',4,5,6-hexabromodiphenylether	F-PBDE-160	50 µg/mL
2166.12-50-T	3'-Fluoro-2,2',3,4,4',5',6-hexaBDE	F-PBDE-183	50 µg/mL
2167.12-50-T	4',6-Difluoro-2,2',3,3',4,5,5',6-octaBDE	2F-PBDE-201	50 µg/mL
2168.12-50-T	4'-Fluoro-2,2',3,3',4,5,5',6,6'-nonabromodiphenylether	F-PBDE-208	50 µg/mL
	Additional Internal Standards		
2258.12-50-T	3'-Fluoro-2,4-dibromodiphenylether	F-PBDE-7	50 µg/mL
2257.12-50-T	3'-Fluoro-3,4-dibromodiphenylether	F-PBDE-12	50 µg/mL
1926.12-50-T	4'-Fluoro-2,3',4-tribromodiphenylether	F-PBDE-25	50 µg/mL
1927.12-50-T	4'-Fluoro-2,3',6-tribromodiphenylether	F-PBDE-27	50 µg/mL
2160.12-50-T	2'-Fluoro-,2,4,4'-tribromodiphenylether	F-PBDE-28	50 µg/mL
2162.12-50-T	6-Fluoro-2,3',4,4'-tetrabromodiphenylether	F-PBDE-66	50 µg/mL
1928.12-50-T	4'-Fluoro-2,3',4,6-tetrabromodiphenyleteher	F-PBDE-69	50 µg/mL
2503.12-50-T	5,6-Difluoro-2,2',3,4,4'-pentabromodiphenylether	2F-PBDE-85	50 µg/mL
2504.12-50-T	3,5-Difluoro-2,3',4,4',6-pentabromodiphenylether	F-PBDE-119	50 µg/mL
1991.12-50-T	3,3',4,4'-Tetrabromodiphenylether	PBDE -77	50 µg/mL
2653.12-50-T	2,2'3,4,4',5,6-Heptabromodiphenylether	PBDE-181	50 µg/mL

For a complete list of internal standards see the Compounds section pages 358-359.

S-4388-50-IO

Multicomponent Stock Solution of native reference substances (§ 5.8)
8 Analytes, each 50µg/mL in isooctane; unit: 1x1mL

S-4389-SET

Calibration Curve Set, Native Compounds (§ 5.9)
Set of 7 solutions in isooctane/toluene; unit: 7x1mL

Compound	Solution 1 ng/mL	Solution 2 ng/mL	Solution 3 ng/mL	Solution 4 ng/mL	Solution 5 ng/mL	Solution 6 ng/mL	Solution 7 ng/mL
PBDE-47	5	12.5	25	50	100	150	250
PBDE-99	5	12.5	25	50	100	150	250
PBDE-100	5	12.5	25	50	100	150	250
PBDE-153	5	12.5	25	50	100	150	250
PBDE-154	5	12.5	25	50	100	150	250
PBDE-183	5	12.5	25	50	100	150	250
PBDE-205	5	12.5	25	50	100	150	250
PBDE-209	25	50	100	200	500	700	1000

Calibration curve sets S-4389 including fluorinated internal standards of choice are available on request (§5.9)

ISO 22032

Fluorinated Internal Standard Calibration curve Set and Stock solutions are available on request (§5.10)

ISO/DIS 23161: 2007
Organotin compounds in soil by GC

NEW

Soil quality - Determination of selected organotin compounds Gas Chromatographic method

This International Standard specifies a method for the identification and quantification of organotin compounds and/or cations in solids such as soil, sediments and waste.

The principle: See ISO 17353, page 32.

S-4380-K-ME
S-4380-K-5ME

ISO 17353/23161 Multicomponent OC* Standard Solution, Stock Solution A
8 Analytes, each 1000µg/mL OC in methanol; units: 5x1mL, 5x5mL
* OC: Organotin cation
OCT: Organotin compound

Prod.No.	Compound	CAS No.	Weight OCT
1983.4	Mono-n-butyltin trichloride	[1118-46-3]	1605 µg/mL
1982.8	Di-n-butyltin dichloride	[683-18-1]	1304 µg/mL
1981.12	Tri-n-butyltin chloride	[1461-22-9]	1122 µg/mL
2497.16	Tetra-n-butyltin	[1461-25-2]	1000 µg/mL
2487.8	Mono-n-octyltin trichloride	[3091-25-6]	1458 µg/mL
2488.16	Di-n-octyltin dichloride	[3542-36-7]	1205 µg/mL
1985.18	Triphenyltin chloride	[639-58-7]	1101 µg/mL
2489.18	Tricyclohexyltin chloride	[3091-32-5]	1096 µg/mL

S-4381-K-ME
S-4381-K-5ME

ISO 17353/23161 Internal Standard OC, Stock Solution B

4 Analytes, each 1000µg/mL OC in methanol; units: 5x1mL, 5x5mL

Prod.No.	Compound	CAS No.	Weight OCT
2496.14	Di-n-heptyltin dichloride	[74340-12-8]	1224 µg/mL
2495.7	Mono-n-heptyltin trichloride	[59344-47-7]	1488 µg/mL
1989.9	Tri-n-propyltin chloride	[2279-76-7]	1143 µg/mL
2490.12	Tetra-n-propyltin	[2176-98-9]	1000 µg/mL

3956-2K-ME
3956-2K-5ME

ISO 21361 Injection standard

Tetra-n-pentyltin [3765-65-9]
2000µg/mL in methanol; units: 5x1mL, 5x5mL

EN standards

EN 12916:2006
Aromatic compounds in middle distillates

Petroleum products – Determination of aromatic hydrocarbon types in middle distillates. High performance liquid chromatography method with refractive index detection.

This European Standard specifies a test method for the determination of the content of mono-aromatic, di-aromatic and tri+-aromatic hydrocarbons in diesel fuels that may contain fatty acid methyl esters (FAME) up to 5% (V/V) and petroleum distillates in the boiling range 150-400ºC.

System calibration standards:

S-4491-ASS-5HP

EN 12916 System Calibration Standards 1 (SCS1)
7 Analytes, each concentration as listed in n-heptane; units: 1x5mL or 5x5mL

Weight% based on the nearest 0.1mg

1301.6	Cyclohexane (5.1)	[110-82-7]	1.0g/100mL
0332.18	1-Phenyldodecane (5.3)	[123-01-3]	0.1g/100mL
1267.81	2-Dimethylbenzene (5.4)	[95-47-6]	0.5g/100mL
2685.12	Hexamethylbenzene (5.5)	[87-85-4]	0.01g/100mL
0711.10	Naphthalene (5.6)	[91-20-3]	0.01g/100mL
0884.12	Dibenzothiophene (5.9)	[132-65-0]	0.05g/100mL
0461.15	9-Methylanthracene (5.10)	[779-02-2]	0.05g/100mL

S-4492-ASS-5HP

EN 12916 System Calibration Standards 2 (SCS2)
2 Analytes, each concentration as listed in n-heptane; units: 1x5mL or 5x5mL

3416	FAME (5.12) as Linoleic acid methyl ester	(3268.19)	0.4g/100mL
0212.18	Chrysene (5.11)		0.04g/100mL

See EN 14214, page 44.

S-4493-ASS-HP
S-4493-ASS-5HP

EN 12916 Calibration Standards
4 Analytes, each concentration as listed in n-heptane; units: 4x1.5mL Certan® bottle, 4x5mL screw cap bottle

Calibration Standard	1,2-Dimethylbenzene g/100mL	Fluorene g/100mL	Phenanthrene g/100mL
A	4.0	2	0.4
B	1.0	1.0	1.0
C	0.25	0.25	0.05
D	0.05	0.02	0.01

EN 12916 Additional standards, see the Compounds section and the Applications / Petroleum sections:

Nonaromatics:
n-Paraffin mixtures
Cyclohexane mix
Naphthene/paraffin mixtures
Mono-alkenes

Monoaromatics:
Alkylbenzene mix
Tetralines
Indanes
Naphthenobenzenes (octahydrophenanthrenes)
Thiophenes
Styrenes
Conjugated polyalkenes

Diaromatics:
See the PAH-section, naphthalenes, biphenyls, acenaphthenes, benzo-and dibenzothiophenes

Triaromatics:
NDP- and NDP/PAH-mixtures
PAH-section: phenanthrenes, pyrenes,fluoranthenes, chrysenes, triphenylenes, benzanthrenenes, triaromatic steranes

Please inquire by fax or e-mail for custom made mixes

EN 14078:2004

Liquid petroleum products – Determination of Fatty Acid Methyl Esters (FAME) in middle distillates - Infrared spectroscopy method

This European standard specifies a test method for the determination of Fatty Acid Methyl Ester (FAME) content in diesel fuel or domestic heating fuel by mid infrared spectrometry in the range 1.7% to 22.7% (V/V).

FAME calibration solutions

S-4495-SET-10CY FAME*, as Linoleic acid methyl ester (Chiron No. 3268.19.), concentration in cyclohexane 1, 2, 4, 6, and 10 g/L; unit: 5x10mL

*Fame: EN 14214, page 44.

EN 14103:2003
FAME for use in biofuels, diesel fuels

Fat and oil derivatives – Fatty Acid Methyl Esters (FAME) - Determination of ester and linolenic acid methyl ester contents

The purpose of this European Standard is to determine the content of fatty acid methyl esters (FAME) intended for use as biofuels or as a blending component for heating and diesel fuels. It also allows the determination the linolenic acid methyl ester content. It allows one to verify the ester content of FAME is greater than 90% by mass (m/m) and that the linolenic acid content is between 1% and 15%. The method is suitable for FAME which contains methyl esters between C14 and C24.

Internal standard

3165.18-10K-30HP **Methyl heptadecanoate, 99+%**
10 mg/mL in n-heptane, 30 mL

S-4496-100-AC **FAME Reference Mixture (rape seed methyl esters):**
13 Analytes, each 100µg/mL each /mL in acetone; unit: 1x1mL

3164.17	Palmitic	C16	[57-10-3]	
3262.17	Palmitolic	C16:1	[1120-25-8]	
3165.18	Heptadecanoic	C17	[506-12-7]	Internal standard
1398.19	Steraric	C18	[112-61-8]	
3273.19	Oleic	C18:1	[112-8-1]	
3268.19	Linoleic	C18:2	[112-63-0]	
3266.19	Linolenic	C18:3	[301-00-8]	
3169.21	Arachdic	C20	[1120-28-1]	
3232.21	Eicosenoic acid (11c)	C20:1	[5561-99-9]	
3171.23	Behenic	C22	[929-77-1]	
3299.23	Erucic	C22:1	[1120-34-9]	
3173.25	Lignoceric	C24	[2442-49-1]	
3302.25	Nervonic	C24:1	[2733-88-2]	

EN 14105:2003

NEW

Fat and oil derivatives – Fatty Acid Methyl Esters (FAME) -Determination of free and total glycerol and mono-, di-, triglyceride contents (Reference method)

This European Standard specifies a method to determine the free glycerol and residual mono-, di-and triclyceride contents in fatty acid methyl ester (FAME) intended for addition to mineral oils. The total glycerol content is then calculated from the results obtained.

This method is suitable for FAME from rapeseed, sunflower and soybean oils, but is not suitable for FAME produced from or containing coconut and palm kernel oils because of overlapping of peaks.

Derivatizing agent

1941.6-1ML **N-methyl-N-trimethylsilyltrifluoroacetamide (MSTFA)**
1941.6-5G [10416-59-6] 1mL, 5 g neat

Internal standards

3642.4-1ML **1,2,4-Butanetriol (Internal Standard No. 1)**
[3068-00-6] 1mL neat

3643.33-1ML **1,2,3-Tricaproylglycerol (tricarpin, Internal Standard No. 2)**
[621-71-6] 1mL neat

3642.4-K-10PY **Internal Standard No. 1 stock solution**
1000μg/mL in dry pyridine 1x10 mL

3643.33-K-10PY **Internal Standard No. 2 stock solution**
1000μg/mL in dry pyridine 1x10 mL

Reference substances

3837.3	Glycerol	[56-81-5]
3838.21	1-Monooleoylglycerol (monoolein)	[111-03-5]
3839.39	1,3-Dioleoylglycerol (diolein)	[25637-84-7]
3840.57	1,2,3-Trioleoylglycerol (triolein)	[122-32-7]

3644.3-500-10PY **Glycerol stock solution**
500μg/mL in dry pyridine 1x10 mL

3645.21-5K-10PY **1-Monooleoylglycerol (monoolein) stock solution**
5000μg/mL in dry pyridine 1x10 mL

3646.39-5K-10PY **1,3-Dioleoylglycerol (diolein) stock solution**
5000μg/mL in dry pyridine 1x10 mL

3647.57-5K-10PY **1,2,3-Trioleoylglycerol (triolein) stock solution**
5000μg/mL in dry pyridine 1x10 mL

S-4497-10K-10PY **Monoglycerides:**
3 analytes, each 10 mg/mL in dry pyridine; unit: 1x10 mL

3648.19	Monopalmitoylglycerol (monopalmitin)	[542-44-9]
3649.21	Monostearoylglycerol (monostearin)	[123-94-4]
3650.21	Monooleoylglycerol (monoolein)	[111-03-5]

Calibration solutions

Calibration solution	**1**	**2**	**3**	**4**	**Syringe, μL**
μL of glycerol solution	10	40	70	100	100
μL of monoolein solution	50	120	190	250	500
μL of diolein solution	10	40	70	100	100
μL of triolein solution	10	30	60	80	100
μL of internal standard sol. No.1	80	80	80	80	100
μL of internal standard sol. No.2	100	100	100	100	500

To be prepared daily from the above solutions

EN 14214:2003

Automotive fuels - Fatty acid methyl esters (FAME) for diesel engines - Requirements and test methods

This European standard exists in parallel with:
EN 590 " Automotive fuels – Diesel – Requirements and test methods".

EN 14214:2003 Requirements

Property	Unit	Min	Max	Method
Ester content	% (m/m)	96.5		EN 14103
Density at 15ºC	kg/m3	860	900	EN ISO 3675 EN ISO 12185
Viscosity at 40ºC	mm2/s	3.50	5.00	EN ISO 3104
Flash point	ºC	120	-	prEN ISO 3679
Sulfur content	mg/kg	-	10.00	prEN ISO 20846 prEN ISO 20884
Carbon residue (on 10% distillation residue)	% (m/m)	-	0,30	EN ISO 10370
Cetane number		51.0		EN ISO 5165
Sulfated ash content	% (m/m)		0.02	ISO 3987
Water content	mg/kg	-	0.02	EN ISO 12937
Total contamination	mg/kg	-	24	EN 12662
Copper strip corrosion rating (3 h at 50ºC)	Class 1			EN ISO 2160
Oxidation stability, 110ºC hours		6.0		EN 14112
Acid value	mg KOH/100 gr		0.50	EN 14104
Iodine number	gr iodine/100g		120	EN 14111
Linolenic acid methyl ester	% (m/m)		12.0	EN 14103
Polyunsaturated (>=4 double bonds)	% (m/m)		1	
Methanol content	% (m/m)		0.80	EN 14110
Monoglyceride cont.	% (m/m)		0.80	EN 14105
Diglyceride content	% (m/m)		0.20	EN 14105
Triglyceride cont.	% (m/m)		0.20	EN 14105
Free glycerol	% (m/m)		0.02	EN 14105 EN 14106
Total glycerol	% (m/m)		0.25	EN 14105
Gr. I metals (Na+K)	mg/kg		5.0	EN 14108 EN 14109
Gr. II met. (Ca+Mg)	mg/kg		5.0	prEN 14538
Phosphorous cont.	mg/kg		10.00	EN 14107

Atmospheric equivalent temperature, 90 % recovered

ASTM methods

ASTM D 664-07
Acid number of petroleum products by potentiometric titration

Standard test method for acid number of petroleum products by potentiometric titration.

This test method covers procedures for the determination of acidic constituents in petroleum products and lubricants soluble or nearly soluble in mixtures of toluene and 2-propanol. It is applicable for the determination of acids whose dissociation constants in water are larger than 10^{-9}; extremely weak acids whose dissociation are smaller than 10^{-9} do not interfere.

S-4069-S

Solvent, ASTM D 664-07
1 L and 10x1 L

Toluene	50.0 %
Isopropanol	49.5 %
Water, ionfree	0.5 %

S-4069-T

Titrant for ASTM D 664-07
0.1 M solution; units. 5x1, 10x1, 20x1 L
KOH in Isopropanol

ASTM D 1685-05
Thiophene in benzene

Standard test method for traces of thiophene in benzene by spectrophotometry

This test method covers the determination of thiophene in benzene in which the thiophene concentration is between 0.1 and 250 mg/kg.

S-4059

Thiophene in Benzene
See ASTM D 4735-02

ASTM D 2622-05
Sulfur in petroleum products

Standard test method for sulfur in petroleum products by wavelength dispersive fluorescence X-Ray spectrometry

This test method covers the determination of total sulfur in liquid petroleum products and in solid petroleum products that can be liquefied with moderate heating. Optimum conditions allow the determination of sulfur in paraffinic samples at concentrations exceeding 0.0020 mass % (20 ppm).

S-4051/S-4052

Calibration Mixtures: Di-n-butyl sulfide in White Oil (less than 5 mg sulfur/L)

Unit : 10 mL screw cap bottle

Light White Mineral Oil (20 cSt at 40°C)	Heavy White Mineral Oil (70 cSt at 40°C)	µgS/g (ppm)	Wt.%
S-4052-0-LW	S-4051-0-HW	Blank	0
S-4052-10-LW	S-4051-10-HW	10	0,001
S-4052-50-LW	S-4051-50-HW	50	0.005
S-4052-100-LW	S-4051-100-HW	100	0.010
S-4052-250-LW	S-4051-250-HW	250	0.025
S-4052-500-LW	S-4051-500-HW	500	0.050
S-4052-750-LW	S-4051-750-HW	750	0.075
S-4052-K-LW	S-4051-K-HW	1 000	0.100
S-4052-2.5K-LW	S-4051-2.5K-HW	2 500	0.250
S-4052-5K-LW	S-4051-5K-HW	5 000	0.500
S-4052-10K-LW	S-4051-10K-HW	10 000	1.000
S-4052-20K-LW	S-4051-20K-HW	20 000	2.000
S-4052-30K-LW	S-4051-30K-HW	30 000	3.000
S-4052-40K-LW	S-4051-40K-HW	40 000	4.000
S-4052-50K-LW	S-4051-50K-HW	50 000	5.000
S-4052-Kit	S-4051-Kit	Kit of above solutions	

ASTM D 2887-06a
Boiling range distribution of petroleum fractions

Standard test method for boiling range distribution of petroleum fractions by gas chromatography.

This test method covers the determination of the boiling range distribution of petroleum products. This test method can be used to petroleum products and fractions having a final boiling point of 538 °C (1000 °F) or lower at atmospheric pressure as measured by this test method. This test method is limited to samples having a boiling range greater than 55°C (100°F), and having a vapour pressure sufficiently low to permit sampling at ambient temperature.

S-4112-100-CS

Calibration Mixture C5-C44 (Revised)

18 Analytes, each 100µg/mL in CS_2; unit: 1x1mL in Certan® bottle

Use for assessing column resolution as well as for quantitative analyses.

n-Pentane	C5	n-Octadecane	C18
n-Hexane	C6	n-Eicosane	C20
n-Heptane	C7	n-Tetracosane	C24
n-Octane	C8	n-Octacosane	C28
n-Nonane	C9	n-Dotriacontane	C32
n-Decane	C10	n-Hexatriacontane	C36
n-Undecane	C11	n-Tetracontane	C40
n-Dodecane	C12	n-Tetratetracontane	C44
n-Tetradecane	C14		
n-Hexadecane	C16		

S-4149-500-MX

Hydrocarbon Window Defining Standard C8-C40

35 Analytes, each 500 μg/mL in CS_2:CH_2Cl_2 (3:1); units: 1x1mL, 1x4.5mL in Certan® bottle

Octane	C8	Nonadecane	C19	Triacontante	C30
Nonane	C9	Phytane	C20	n-Hentriacontane	C31
Decane	C10	Eicosane	C20	Dotriacontane	C32
Undecane	C11	Heneicosane	C21	Tritriacontane	C33
Dodecane	C12	Docosane	C22	Tetratriacontane	C34
Tridecane	C13	Tricosane	C23	Pentatriacontane	C35
Tetradecane	C14	Tetracosane	C24	Hexatriacontane	C36
Pentadecane	C15	Pentacosane	C25	Heptatriacontane	C37
Hexadecane	C16	Hexacosane	C26	Octatriacontane	C38
Heptadecane	C17	Heptacosane	C27	Nonatriacontane	C39
Octadecane	C18	Octacosane	C28	Tetracontane	C40
Pristane	C19	Nonacosane	C29		

S-4151-10K-OC

Column Resolution Test Mix C16-C18

2 Analytes, each 1 mass % in n-octane; unit: 5x1 mL

n-Hexadecane	C16
n-Octadecane	C18

S-4210-2K-MX

Fuel Oil Degradation/Retention Time Mix C17-C20

4 Analytes, each 2,0 mg/mL in CS_2:CH_2Cl_2 (1:1); unit: 1x4.5mL in Certan®
Use this standard for the quantification of C17/Pristane and C18/Phytane ratios.

Heptadecane	C17
Octadecane	C18
Pristane (2,6,10,14-Tetramethylpentadecane)	C19
Phytane (2,6,10,14-Tetramethylhexadecane)	C20

ASTM D 3120-06e1
Sulfur in light liquid petroleum hydrocarbons

Standard test method for trace quantities of sulfur in light liquid petroleum hydrocarbons by oxidative microcoulometry

This test method covers determination of sulfur in the range 3.0 - 1000 ppm (mg/kg) in light liquid hydrocarbons boiling at 26 to 274 °C (80 to 525 °F).

S-4050-ASS-IO

Calibration Mixtures: Di-n-butyl sulfide in Isooctane

Unit: 1x10mL screw cap bottle

Isooctane	µgS/g (ppm)	Wt.%
S-4050-0-IO	Blank	0
S-4050-1-IO	1	0.0001
S-4050-3-IO	3	0.0003
S-4050-10-IO	10	0.0010
S-4050-20-IO	20	0.0020
S-4050-30-IO	30	0.0030
S-4050-50-IO	50	0.0050
S-4050-75-IO	75	0.0075
S-4050-100-IO	100	0.0100
S-4050-Kit	Kit of above solutions	

ASTM D 3246-05
Sulfur in petroleum

Standard test method for sulfur in petroleum gas by oxidative microcoulometry

This test method covers determination of sulfur in the range from 1.5 to 100 mg/kg (ppm by mass) in hydrocarbon products that are gaseous at normal room temperature and pressure.

Calibration Mixtures: See ASTM D 3120 above (S-4050 di-n-butyl sulfide in isooctane).

ASTM D 3606-06e1
Benzene and toluene in finished motor and aviation gasolines by GC

Standard test method for the determination of benzene and toluene in finished motor and aviation gasoline by gas chromatography.

This test method provides for the determination of benzene and toluene in finished motor and aviation gasolines by gas chromatography.

S-4164-SET

Aromatics Quantitative Calibration Standards

(without Internal Standard)

2 Analytes, each Vol.% as listed in isooctane; unit: 7x25mL, one of each Std.

Analyte	Analyte Calibr. range	Std. 1 Vol.%	Std. 2 Vol.%	Std. 3 Vol.%	Std. 4 Vol.%	Std. 5 Vol.%	Std. 6 Vol.%	Std. 7 Vol.%
Benzene	0.06-5.0	5.00	2.50	1.25	0.67	0.33	0.12	0.06
Toluene	0.5-20	20.00	15.00	10.00	5.00	2.50	1.00	0.50
Isooctane		75.00	82.50	88.75	94.33	97.17	98.88	99.44

S-4206-SET

Aromatics Quantitative Calibration Standards
(with Internal Standard)
3 Analytes, each Vol.% as listed in isooctane; units: 7x1mL, 7x2mL and 5x(7x2)mL, one of each Std.

Analyte	Analyte Calibr. range	Std. 1 Vol.%	Std. 2 Vol.%	Std. 3 Vol.%	Std. 4 Vol.%	Std. 5 Vol.%	Std. 6 Vol.%	Std. 7 Vol.%
Benzene	0.06- 5.0	4.8	2.4	1.2	0.64	0.32	0.12	0.06
Toluene	0.5-20	19.2	14.4	9.6	4.8	2.4	0.95	0.48
Isooctane		72.0	79.2	85.2	90.56	93.28	94.93	95.46
Methylethyl ketone (Int. Std.)		4.0	4.0	4.0	4.0	4.0	4.0	4.0

S-4204-ASS-10IO

Dialy Quality Control Standard
(with Internal Standard)
3 Analytes, each Vol.% as listed in isooctane; units: 1x10 mL, 5x10 mL.

Name	Vol.%
Benzene	0.64
Toluene	4.8
Isooctane	90.56
Methylethylketone (Int.Std.)	4.0

S-4205-ASS-10IO

Dialy Quality Control Standard
(without Internal Standard)
2 Analytes, each Vol.% as listed in isooctane; units: 1x10 mL, 5x10 mL.

Name	Vol.%
Benzene	0.67
Toluene	5.0
Isooctane	94.33

ASTM D 3710-95(2004) Boiling range distribution of gasoline and gas fractions by GC

Standard test method for boiling range distribution of gasoline and gasoline fractions by gas chromatography

This test method covers the determination of the boiling range distribution of gasoline and gasoline components. This test method is applicable to petroleum products and fractions with a final boiling point of 260 °C (500 °F) or lower as measured by this test method.

S-4147-1ML

Calibration Standard
16 Analytes, each Wt.% as listed; units: 1x1mL, 5x1mL neat

This standard can be used for qualitative and quantitative analyses.

Name	Wt. %	Name	Wt. %
2-Methylbutane	10.0	p-Xylene	13.0
n-Pentane	8.0	n-Propylbenzene	5.0
2-Methylpentane	6.0	n-Decane	4.0
n-Hexane	6.0	n-Butylbenzene	4.0
2,4-Dimethylpentane	6.0	n-Dodecane	3.5
n-Heptane	10.0	n-Tridecane	2.5
Toluene	11.0	n-Tetradecane	2.5
n-Octane	6.0	n-Pentadecane	2.5

ASTM D 3798-03
p-Xylene by GC

Standard test method for analysis of p-xylene by gas chromatography

This test method covers the determination of known hydrocarbon impurities in, and the purity of p-xylene by gas chromatography. It is generally meant for the analysis of p-xylene of 99% or greater purity. Impurity concentrations can be measured range from 0.001 to 1.000 weight %.

S-4270-1ML

p-Xylene Impurity Standard with Internal Standards
11 Analytes, each Wt.% as listed; units: 1x1mL, 5x1mL + ISTD, neat

Name	Wt. %	Name	Wt. %
n-Pentane	0.15	p-Xylene	98.65
n-Octane	0.15	m-Xylene	0.15
Benzene	0.15	o-Xylene	0.15
Toluene	0.15	Cumene	0.15
Ethylbenzene	0.15	Propylbenzene	0.15
n-Undecane (ITSD)	0.5 g		

ASTM D 4294-03
Sulfur in petroleum products

Standard test method for sulfur in petroleum and petroleum products by energy-dispersive x-ray fluorescence spectroscopy

This test method covers the measurement of sulfur in hydrocarbons such as naphthas, distillates, fuel oils, residues, lubricating base oils and nonleaded gasoline. The concentration range is from 0.015 to 5.00 mass % (150 to 50 000 ppm) sulfur.

S-4051/S-4052

Sulfur Calibration Mixtures: Di-n-butyl sulfide in White Oil (less than 20mg/kg S)
Unit : 10 mL screw cap bottle

Light White Mineral Oil (20 cSt at 40°C)	Heavy White Mineral Oil (70 cSt at 40°C)	mgS/g (ppm)	Wt.%
S-4052-0-LW	S-4051-0-HW	Blank	0
S-4052-100-LW	S-4051-100-HW	100	0.01
S-4052-K-LW	S-4051-K-HW	1 000	0.1
S-4052-5K-LW	S-4051-5K-HW	5 000	0.5
S-4052-10K-LW	S-4051-10K-HW	10 000	1
S-4052-25K-LW	S-4051-25K-HW	25 000	2.5
S-4052-50K-LW	S-4051-50K-HW	50 000	5
S-4052-Kit	S-4051-Kit	Kit of above solutions	

ASTM D 4629-02
Trace nitrogen in petroleum products

Standard test method for trace nitrogen in liquid petroleum hydrocarbons by syringe/inlet oxidative combustion and chemiluminescence detection.

This test method is used to determine trace total nitrogen naturally found in liquid hydrocarbons boiling point from 50 to 400 °C and with viscosities between 0.2 and 10 cSt. Use of this method to monitor feed stocks for nitrogen can prevent the poisoning of some process catalysts when trace nitrogenous materials are present.

S-4140-ASS-IO

Nitrogen Calibration Set-Low Boiling Solvents
Units: 1x1mL ampoules or 10 mL screw cap bottle
Nitrogen introduced using Pyridine

Catalogue No. Matrix: isooctane	Concentration mg/kg (ppm)
S-4140-0-IO	Blank
S-4140-03-IO	0.3
S-4140-1-IO	1.0
S-4140-10-IO	10
S-4140-25-IO	25
S-4140-50-IO	50
S-4140-75-IO	75
S-4140-100-IO	100

S-4141-ASS-IO

Nitrogen Calibration Set-High Boiling Solvents
Units: 1x1mL ampoules or 10 mL screw cap bottle
Nitrogen introduced using Carbazole

Catalogue No. Matrix: isooctane	Concentration mg/kg (ppm)
S-4141-0-IO	Blank
S-4141-03-IO	0.3
S-4141-1-IO	1.0
S-4141-10-IO	10
S-4141-25-IO	25
S-4141-50-IO	50
S-4141-75-IO	75
S-4141-100-IO	100

S-4142-ASS-IO **Low level Nitrogen Calibration**

Units: 1x1mL ampoules or 10mL screw cap bottle
Nitrogen introduced using Aniline

Catalogue No. Matrix: isooctane	Concentration mg/kg (ppm)
S-4142-0-IO	Blank
S-4142-05-IO	0.5
S-4142-1-IO	1.0
S-4142-2-IO	2.0
S-4142-5-IO	5.0
S-4142-10-IO	10.0

S-4143-ASS-B **Low level Nitrogen & Sulfur Calibration Set**

Units: 1x1mL ampoules or 10mL screw cap bottle
Nitrogen introduced using Aniline / Sulfur introduced using di-n-Butyl Sulfide

Catalogue No. Matrix: Benzene	Concentration mg/kg (ppm)
S-4143-0-B	Blank
S-4143-025-B	0.25
S-4143-050-B	0.50
S-4143-1-B	1.00

ASTM D 4735-02
Thiophene in refined benzene by GC

Standard test method for determination of trace thiophene in refined benzene by gas chromatography

This test method covers the determination of thiophene in refined benzene from 0.5 mg/kg to 5.0 mg/kg.

S-4059-ASS-LW **Thiophene in Thiophene-free Benzene**

Units: 1x1mL ampoule, 10 mL screw cap bottle

Light White Mineral Oil (20 cSt at 40°C)	*µ*g thiophene/g (ppm)	Wt.%
S-4059-0-LW	Blank	0
S-4059-05-LW	0.5	0.00005
S-4059-1-LW	1.0	0.00010
S-4059-2-LW	2.0	0.00020
S-4059-4-LW	4.0	0.00040
S-4059-Kit	Kit of above solutions	

ASTM D 4815-04
Ethers and alcohols in gasoline by GC

Standard test method for determination of MTBE, ETBE, TAME, DIPE, tertiary-amyl alcohol and C1 to C4 alcohols in gasoline by gas chromatography.

This test method covers the determination of ethers and alcohols in gasolines by gas chromatography. Specific compounds determined are methyl tert-butyl ether (MTBE), ethyl tert-butyl ether (ETBE), tert-amylmethyl ether (TAME), diisopropyl ether (DIPE), methanol, ethanol, isopropanol, n-propanol, isobutanol, tert-butanol, sec-butanol, n-butanol, and tert-pentanol (tert-amylalcohol).

S-4174-SET

Oxygenated Quantitative Calibration Mixtures

(without Internal Standard)

4 Analytes, each Wt.% as listed in isooctane/xylene (65:35); unit: 5x10mL, one of each Std.

Analyte	Analyte Calibration range	Std. 1 Wt. %	Std. 2 Wt. %	Std. 3 Wt. %	Std. 4 Wt. %	Std. 5 Wt. %
Ethanol	0.10-11.40	3.00	0.10	6.00	9.00	12.00
t-Butanol	0.10-11.40	0.10	3.00	6.00	8.00	12.00
Methyl t-butylether	0.10-19.00	20.0	15.0	10.0	5.00	0.10
t-Pentanol	0.10- 4.79	1.25	5.00	2.50	3.75	0.10
Isooctane/Xylene (65:35)	75.65	76.90	75.50	74.25	75.80	

S-4175-SET

Oxygenated Quantitative Calibration Mixtures

(with Internal Standard)

5 Analytes, each Wt.% as listed in isooctane/xylene (65:35); unit: 5x1mL, one of each Std.

Analyte	Analyte Calibration range	Std. 1 Wt. %	Std. 2 Wt. %	Std. 3 Wt. %	Std. 4 Wt. %	Std. 5 Wt. %
Ethanol	0.10-11.40	2.85	0.10	5.70	8.55	11.40
t-Butanol	0.10-11.40	0.10	2.85	5.70	7.60	11.40
Methyl t-butylether	0.10-19.00	19.00	14.25	9.50	4.75	0.10
t-Pentanol	0.10- 4.79	1.19	4.75	2.38	3.56	0.10
1,2-Dimethoxyethane (Int.Std.)		5.00	5.00	5.00	5.00	5.00
Isooctane/Xylene (65:35)		71.87	73.06	71.73	70.54	72.00
Total Oxygenates & Inter. Std.		**28.14**	**26.95**	**28.28**	**29.46**	**28.00**

S-4176-1ML

Qualitative Peak ID Mixture

16 Analytes, each Wt.% as listed; units: 1x1 mL and 5x1 mL neat

Name	Wt. %	Name	Wt. %
Methylcyclopentane	4.0	Diisopropyl ether	4.0
Methanol	7.3	Isobutanol	7.3
Ethanol	7.3	Ethyl tert-butyl ether	4.0
Isopropanol	7.3	tert-Pentanol	7.3
tert-Butanol	7.3	1,2-Dimethoxyethane	6.0
n-Propanol	7.3	n-Butanol	7.3
Methyl tert-butyl ether	4.0	Benzene	5.0
sec-Butanol	7.3	tert-Amyl methyl ether	7.3

S-4177-ASS-HX

Valve Timing Mixture

4 Analytes, each Wt.% as listed in n-hexane; units: 1x1mL, 5x1mL

Name	Wt.%
Methylcyclopentane	10.00
Diisopropyl ether	10.00
Ethyl tert-butyl ether	10.00
Methyl tert-butyl ether	10.00
n-Hexane	60.00

2046.4-1ML

Oxygenate Internal Standard mixture

Units : 1x1mL, 5x1mL

1,2-Dimethoxyethane (Neat)

S-4186-10ML

Oxygenate Free Refinery Gasoline

Blank; unit: 1x10mL, 5x10mL

RFA Gasoline (Neat)

ASTM D 4951-06
Additives in lubricating oils

Standard test method for determination of additive elements in lubricating oils by inductively coupled plasma atomic emission spectrometry

This test method covers the quantitative determination of barium, boron, calcium, copper, magnesium, phosphorus, sulfur and zinc in unused lubricating oils. The precision statements are valid for dilutions in which the mass % sample in solvent is held constant in the range 1 to 5 mass % oil.
Sulfur can be determined if the instrument can operate at a wavelength of 180 nm.

Standards:

Di-n-butyl sulfide in solvent of choice (e.g. S-4050, S-4051, S-4052)

See the Applications section for sulfur and phosphorous analysis, pages 195 and 204.

ASTM D 5186-03
Determination of aromatic content & polynuclear aromatic content by SFC

Standard test method for determination of the aromatic content and polynuclear aromatic content of diesel fuels and aviation turbine fuels by supercritical fluid chromatography.

This test method covers the determination of the total amount of monoaromatic and polynuclear aromatic hydrocarbon compounds in motor diesel fuels, aviation turbine fuels, and blend stocks by supercritical fluid chromatography (SFC).

S-4157-1ML

Performance Control Mixture

4 Analytes each Wt.% as listed; units: 1x1 mL, 5x1 mL neat

Name	Wt. %	Name	Wt. %
n-Hexadecane	75.0	Tetralin	3.0
Naphthalene	2.0	Toluene	20.0

S-4158-ASS-HD

Detector Linearity Check

Unit: 2x1mL

25 % w/w # 2 Diesel Fuel in n-Hexadecane
50 % w/w # 2 Diesel Fuel in n-Hexadecane

ASTM D 5307-97(2002) Boiling range distribution of crude petroleum by GC

Standard test method for determination of boiling range distribution of crude petroleum by gas chromatography

This test method covers the determination of the boiling range distribution of water-free crude petroleum through 538 °C (1000 °F). Material boiling above 538 °C is reported as residue. This test method is applicable to whole crude samples, which can be solubilized in a solvent to permit sampling by means of a microsyringe.

S-4144-5K-CS

Petrochemical Quantitative Standard C10-C44

16 Analytes, each 5000µg/mL in carbon disulfide (CS_2); units: 1x1,5 mL, 5x1,5mL
Use to determine detector response factors.

n-Decane	C10	n-Eicosane	C20
n-Undecane	C11	n-Tetracosane	C24
n-Dodecane	C12	n-Octacosane	C28
n-Tridecane	C13	n-Dotriacontane	C32
n-Tetradecane	C14	n-Hexatriacontane	C36
n-Pentadecane	C15	n-Tetracontane	C40
n-Hexadecane	C16	n-Tetratetracontane	C44
n-Heptadecane	C17		
n-Octadecane	C18		

S-4145-1ML

Petrochemical Qualitative Standard C5-C9

5 Analytes, equal Wt.%; unit: 1x1mL neat

Use in combination with Petrochemical Quantitative Standard (S-4144) to prepare a calibration mixture covering C5 to C44 for calibrating retention times for boiling point correlation.

n-Pentane	C5
n-Hexane	C6
n-Heptane	C7
n-Octane	C8
n-Nonane	C9

S-4146-25ML

Petrochemical Internal Standard C14-C17

4 Analytes, equal Wt.%; unit : 25 ml screw-capped bottle

n-Tetradecane	C14	n-Hexadecane	C16
n-Pentadecane	C15	n-Heptadecane	C17

S-4151-10K-OC

Column Resolution Test Mix C16-C18

2 Analytes, each 1,0 Wt.% in n-Octane; unit : 5x1 mL

n-Hexadecane	C16
n-Octadecane	C18

ASTM D 5441-98(2003)e1
Purity of methyl tert-butyl ether by GC

Standard test method for analysis of methyl tert-butyl ether (MTBE) by gas chromatography.

This test method provides for determination of the purity of methyl tert-butyl ether (MtBE) by gas chromatography. It also provides a procedure to measure impurities in MtBE such as C4 to C12 olefins, methyl, isopropyl and tert-butyl alcohols, methyl sec-butyl and methyl tert-amyl ethers, acetone, and methyl ethyl ketone.

S-4180-K-MT
S-4180-K-5MT

MTBE Contaminant Standard

Low Contaminant Mixture

11 Analytes, each 0,1 Wt.% in MTBE; units: 1x1mL, 5x1mL, 1x5mL, 5x5mL

tert-Amyl methyl ether	2-Methylbutane	trans-2-Pentene
tert-Butanol	2-Methyl-2-butene	Triisobutylene
tert-Butyl ethyl ether	Pentane	2,4,4-Trimethyl-1-pentene
Methanol	cis-2-Pentene	

S-4181-10K-MT
S-4181-10K-5MT

MTBE Contaminant Standard

High Contaminant Mixture

11 Analytes, each 1,0 Wt.% in MTBE; units: 1x1mL, 5x1mL, 1x5mL, 5x5mL

tert-Amyl methyl ether	2-Methylbutane	trans-2-Pentene
tert-Butanol	2-Methyl-2-butene	Triisobutylene
tert-Butyl ethyl ether	Pentane	2,4,4-Trimethyl-1-pentene
Methanol	cis-2-Pentene	

S-4182-10K-MT
S-4182-10K-5MT

MTBE Resolution Test Mixture

3 Analytes, each 1,0 Wt.% in MTBE; units: 1x1mL, 5x1mL, 1x5mL, 5x5mL

trans-2-Pentene
tert-Butanol
cis-Pentene

S-4184-K-DD

Qualitative Standard

32 Analytes, each 0,1 Wt.% in n-Dodecane; unit: 1x1mL

Methanol	n-Pentane	3-Methylpentane
Isobutylene	trans-2-Pentene	sec-Butyl methyl ether
n-Butane	tert-Butanol	Ethyl tert-butyl ether
trans-2-Butene	cis-2-Pentene	tert-Amyl methyl ether
cis-2-Butene	2-Methyl-2-butene	3,5-Dimethyl-1-hexene
3-Methyl-1-butene	Cyclopentene	2,4,4-Trimethyl-1-pentene
Acetone	Methyl tert-butyl ether	2,4,4-Trimethyl-2-pentene
Isopentane	2,3-Dimethyl-1-butene	3,4,4-Trimethyl-trans-2-pentene
2-Propanol	4-Methyl-cis-2-pentene	2,3,4-Trimethyl-2-pentene
1-Pentene	2-Methylpentane	2,2',4,6,6'-Pentamethyl-3-heptene
2-Methyl-1-butene	Methyl ethyl ketone	

S-4183-K-DD

Quantitative Standard

28 Analytes, each 0,1 Wt.% in n-Dodecane; unit: 1x1mL

Methanol	cis-2-Pentene	Ethyl tert-butyl ether
3-Methyl-1-butene	2-Methyl-2-butene	tert-Amyl methyl ether
Acetone	Cyclopentene	3,5-Dimethyl-1-hexene
Isopentane	Methyl tert-butyl ether	2,4,4-Trimethyl-1-pentene
2-Propanol	2,3-Dimethyl-1-butene	2,4,4-Trimethyl-2-pentene
1-Pentene	4-Methyl-cis-2-pentene	3,4,4-Trimethyl-trans-2-pentene
2-Methyl-1-butene	2-Methylpentane	2,3,4-Trimethyl-2-pentene
n-Pentane	Methyl ethyl ketone	2,2,4,6,6-Pentamethyl-3-heptene
trans-2-Pentene	3-Methylpentane	
tert-Butanol	sec-Butyl methyl ether	

ASTM D 5442-93(2003)e1
Analysis of petroleum waxes

Standard test method for analysis of petroleum waxes by gas chromatography.

This test method covers the quantitative determination of the carbon number distribution of petroleum waxes in the range from n-C17 through n-C44 by gas chromatography using internal standardization. In addition, the content of linear and non-linear hydrocarbons for each carbon number is also determined.

S-4152-100-CY

Quantitative Linearity Wax Mixture C16-C44

Each 0.01 Wt. % in Cyclohexane; unit: 1mL, 5x1mL

n-Hexadecane	C16	n-Octacosane	C28
n-Octadecane	C18	n-Triacontane	C30
n-Eicosane	C20	n-Dotriacontane	C32
n-Docosane	C22	n-Hexatriacontane	C36
n-Tetracosane	C24	n-Tetracontane	C40
n-Hexacosane	C26	n-Tetratetracontane	C44

S-4139-500MG

Retention Time Wax Mixture C16-C44

12 Analytes, each 8.3 Wt. % in Cyclohexane; unit: 500 mg neat
Use this standard to establishing the retention times from C16 to C44.

n-Hexadecane	C16	n-Octacosane	C28
n-Octadecane	C18	n-Triacontane	C30
n-Eicosane	C20	n-Dotriacontane	C32
n-Docosane	C22	n-Hexatriacontane	C36
n-Tetracosane	C24	n-Tetracontane	C40
n-Hexacosane	C26	n-Tetratetracontane	C44

S-4153-500-CY

Column Resolution Test Mix C20-C24

2 Analytes, each 0,05 Wt.% in cyclohexane; unit : 5x1mL

n-Eicosane	C20
n-Tetracosane	C24

ASTM D 5443-04
Determination of PNA in distillates

Standard test method for paraffin, naphthene, and aromatic hydrocarbon type analysis in petroleum distillates through 200°C by multi-dimensional gas chromatography

This test method provides for the determination of paraffins, naphthenes, and aromatics by carbon number in low olefinic hydrocarbon streams having final boiling points of 200°C or less. Hydrocarbons with boiling points greater than 200°C and less than 270°C are reported as a single group. Olefins, if present, are hydrogenated and the resultant saturates are included in the paraffin and naphthene distribution. Aromatics with the same or higher boiling points than C9 are reported as a single aromatic group.

S-4128-500MG

Hydrocarbon Test Mixture

28 Analytes, each Wt.% as listed; unit: 500 mg neat

Name	Wt. %	Name	Wt. %
Cyclopentane	1.0	n-Decane	4.5
n-Pentane	1.0	n-Undecane	3.5
Cyclohexane	2.0	n-Dodecane	3.0
2,3-Dimethylbutane	2.0	Benzene	2.5
n-Hexane	2.0	Toluene	2.0
1-Hexene	1.5	trans-Decahydronaphthalene	4.0
Methylcyclohexane	4.5	n-Tetradecane	4.5
4-Methyl-1-hexene	1.5	Ethylbenzene	4.5
n-Heptane	3.5	o-Xylene	4.0
1,cis-2-Dimethylcyclohexane	5.0	n-Propylbenzene	5.0
Isooctane	5.0	1,2,4-Trimethylbenzene	4.5
n-Octane	5.0	1,2,3-Trimethylbenzene	5.0
1-cis-2-cis-4-Trimethylcyclohexane	4.5	1,2,4,5-Tetramethylbenzene	5.0
n-Nonane	4.5	Pentamethylbenzene	5.0

ASTM D 5453-06
Sulfur in light hydrocarbons, motor fuels and oils

Standard test method for determination of total sulfur in light hydrocarbons, spark ignition engine fuel, diesel engine fuel, and engine oil by ultraviolet fluorescence

This test method covers the determination of total sulfur in liquid hydrocarbons, boiling at 25°C to 400°C, with viscosities between approximately 0.2 and 20 cSt at room temperature. This test method is applicable to naphthas, distillates, oils, and motor fuels, such as: gasoline, oxygen enriched gasoline, diesel, biodiesel and jet fuel. Samples containing 1.0 to 8000 mg/kg total sulfur (1 to 8000 ppm) can be analyzed.

NB! White Oil 3 cSt is similar to diesel fuel.

S-4055	**Sulfur Calibr. Mix.**	**Dibenzothiophene in Isooctane**
S-4159	**Sulfur Calibr. Mix.**	**Dibenzothiophene in White oil (3 cSt)**
S-4256	**Sulfur Calibr. Mix.**	**Dibenzothiophene in White oil (20 cSt)**
S-4254	**Sulfur Calibr. Mix.**	**Dibenzothiophene in Toluene**

Unit: 10mL screw cap bottle

Matrix

Isooctane	Toluene	White oil 3 cSt	White Oil 20 cSt	Concentration µgS/g (ppm)	Wt.%
S-4055-0-IO	S-4254-0-T	S-4159-0-3C	S-4256-0-LW	Blank	0
S-4055-1-IO	S-4254-1-T	S-4159-1-3C	S-4256-1-LW	1	0.0001
S-4055-2.5-IO	S-4254-2.5-T	S-4159-2.5-3C	S-4256-2.5-LW	2.5	0.00025
S-4055-5-IO	S-4254-5-T	S-4159-5-3C	S-4256-5-LW	5	0.0005
S-4055-25-IO	S-4254-25-T	S-4159-25-3C	S-4256-25-LW	25	0.0025
S-4055-50-IO	S-4254-50-T	S-4159-50-3C	S-4256-50-LW	50	0.0050
S-4055-100-IO	S-4254-100-T	S-4159-100-3C	S-4256-100-LW	100	0.0100
S-4055-500-IO	S-4254-500-T	S-4159-500-3C	S-4256-500-LW	500	0.0500
S-4055-K-IO	S-4254-K-T	S-4159-K-3C	S-4256-K-LW	1 000	0.1000
S-4055-2.5K-IO				2 500	0.2500
S-4055-5K-IO				5 000	0.5000
S-4055-10K-IO				10 000	1.0000
S-4055-Kit	S-4254-Kit	S-4159-Kit	S-4256-Kit	Kit of above solutions	

ASTM D 5580-02
Determination aromatics in gasoline by GC

Standard test method for determination of benzene, toluene, ethylbenzene, p/m-xylene, o-xylene, C9 and heavier aromatics, and total aromatics in finished gasoline by gas chromatography.

This test method covers the determination of benzene, toluene, ethylbenzene, the xylene, C9 and heavier aromatics, and total aromatics in finished motor gasoline by gas chromatography.

S-4165-SET **Aromatics Quantitative Calibration Mixes**

(without Internal Standard)

5 Analytes, each Wt% as listed in isooctane; unit: 5x10mL, one of each Std.

Analyte	Analyte Calibration range	Std. 1 Wt. %	Std. 2 Wt. %	Std. 3 Wt. %	Std. 4 Wt. %	Std. 5 Wt. %
Benzene	0.10- 5.00	0.10	0.50	1.00	2.00	5.00
Toluene	1.00-15.00	15.00	10.00	5.00	2.50	1.00
Ethylbenzene	0.50-10.00	0.50	1.00	2.50	5.00	10.00
o-Xylene	0.50-10.00	1.00	2.50	10.00	5.00	0.50
1,2,4-Trimethylbenzene	0.50-10.00	1.00	10.00	0.50	5.00	2.50
Isooctane		82.40	76.00	81.00	80.50	81.00

S-4166-SET

Aromatics Quantitative Calibration Mixes

(with Internal Standard)

5 Analytes + 2-hexanone as internal standard, each Wt.% as listed in isooctane; unit: 5x1mL one of each Std.

Analyte	Analyte Calibration range	Std. 1 Wt. %	Std. 2 Wt. %	Std. 3 Wt. %	Std. 4 Wt. %	Std. 5 Wt. %
Benzene	0.09- 4.50	0.09	0.45	0.90	1.80	4.50
Toluene	0.90-13.50	13.50	9.00	4.50	2.25	0.90
Ethylbenzene	0.45- 9.00	0.45	0.90	2.25	4.50	9.00
o-Xylene	0.45- 9.00	0.90	2.25	9.00	4.50	0.45
1,2,4-Trimethylbenzene	0.45- 9.00	0.90	9.00	0.45	4.50	2.25
2-Hexanone (ISTD)		10.00	10.00	10.00	10.00	10.00
Isooctane		74.16	68.40	72.90	72.45	72.90

S-4167-ASS-10IO

Valve Timing Calibration Mix

(without Internal Standard)

4 Analytes, each Wt.% as listed in isooctane; units: 1x10mL, 5x10 mL

Name	Wt.%	Name	Wt.%
Benzene	5.0	o-Xylene	10.0
Toluene	5.0	Isooctane	70.0
Ethylbenzene	10.0		

S-4168-ASS-10IO

Valve Timing Calibration Mix

(with Internal Standard)

5 Analytes, each Wt.% as listed in isooctane; units: 1x10 mL and 5x10 mL

Name	Wt.%	Name	Wt.%
Benzene	4.5	o-Xylene	9.0
Toluene	4.5	2-Hexanone (ISTD)	10.0
Ethylbenzene	9.0	Isooctane	63.0

2045.6-5ML

Internal Standard

2-Hexanone; units: 1x5ml, 5x5ml neat

1132-12-15K-IO

Selectivity Check Standard

n-Dodecane, 1,5 Wt.% in isooctane; units: 1x1mL, 5x1mL

S-4171-10ML

Daily Quality Control Standard
(without Internal Standard)
14 Analytes, each Wt.% as listed; units: 1x10mL, 5x10mL neat

Name	Wt.%	Name	Wt.%
n-Hexane	12	Toluene	9
n-Heptane	20	Ethylbenzene	2
n-Octane	15	p-Xylene	3
n-Decane	10	o-Xylene	2
n-Dodecane	1	1,2,4-Trimethylbenzene	3
Isooctane	20	1,2,4,5-Tetramethylbenzene	1
Benzene	1	Naphthalene	1

S-4172-10ML

Daily Quality Control Standard
(with Internal Standard)
15 Analytes, each Wt.% as listed; units: 1x10mL, 5x10mL neat

Name	Wt.%	Name	Wt.%
n-Hexane	11	Ethylbenzene	1
n-Heptane	19	p-Xylene	2
n-Octane	14	o-Xylene	1
n-Decane	9	1,2,4-Trimethylbenzene	2
n-Triadecane	1	1,2,4,5-Tetramethylbenzene	1
Isooctane	19	Naphthalene	1
Benzene	1	2-Hexanone (ISTD)	10
Toluene	8		

ASTM D 5599-00(2005) Quantitative determination of oxygenates in gasoline by GC

Standard test method for determination of oxygenates in gasoline by gas chromatography and oxygen selective flame Ionization detection.

This test method covers the quantitative determination of organic oxygenated compounds in gasoline having a final boiling point not greater than 220 °C and oxygenates having a boiling point limit of 130 °C.

S-4202-SET

Oxygenates Calibration Curve
(with Internal Standard)
14 Analytes, each Wt.% as listed in RFA Gasoline; units: 8x1mL, 5x(8x1)mL, one of each Std.

Analyte		Std.1	Std.2	Std.3	Std.4	Std.5	Std.6	Std.7	Std.8
Calibration range		**Wt. %**	**Wt. %**	**Wt. %**	**Wt. %**	**Wt. %**	**Wt. %**	**Wt. %**	**Wt. %**
Methanol	0.1- 5.0	—-	0.1	2.5	—-	5	0.5	1	—-
Ethanol	1.0-12.0	12	—-	3	—-	8	5	1	—-
Isopropanol	0.1- 2.0	2	1	—-	0.1	0.3	—-	0.5	—-
t-Butanol	0.1- 2.0	0.5	0.1	1	—-	2	0.3	—-	—-
Propanol	0.2- 2.0	2	—-	0.7	0.2	1	—-	0.4	—-
MtBE	1.0- 17.0	5	17	—-	—-	1	2.5	10	—-
sec-Butanol	0.1- 2.5	1	—-	0.5	0.1	—-	2.5	0.7	—-
Diisopropyl ether	0.1- 2.0	—-	0.5	0.3	0.1	2	1	—-	—-
iso-Butanol	0.1- 2.0	2	0.5	—-	1	0.1	0.3	—-	—-
EtBE	1.0-18.0	—-	3.5	18	7.5	—-	1	12	—-
t-Pentanol	0.1- 2.0	0.3	1	—-	0.5	0.1	2	—-	—-
Butanol	0.1- 2.0	1	—-	0.3	—-	0.5	0.1	2	—-
TAME	1.0-18.0	—-	3.5	1	18	7.5	12	—-	—-
1,2-Dimethoxyethane (ISTD)		4	4	4	4	4	4	4	—-
RFA Gasoline		70.2	68.8	68.7	68.5	68.5	68.8	68.4	100
Total oxygenates & ISTD		29.8	31.2	31.3	31.5	31.5	31.2	31.6	0

S-4201-SET

Oxygenates Calibration Curve

(without Internal Standard)

13 Analytes, each Wt.% as listed in RFA Gasoline; unit: 8x10mL, one of each Std.

Analyte		Std.1	Std.2	Std.3	Std.4	Std.5	Std.6	Std.7	Std.8
Calibration range		**Wt. %**	**Wt. %**	**Wt. %**	**Wt. %**	**Wt. %**	**Wt. %**	**Wt. %**	**Wt. %**
Methanol	0.1- 5.0	—-	0.1	2.5	—-	5	0.5	1	—-
Ethanol	1.0-12.0	12	—-	3	—-	8	5	1	—-
Isopropanol	0.1- 2.0	2	1	—-	0.1	0.3	—-	0.5	—-
t-Butanol	0.1- 2.0	0.5	0.1	1	—-	2	0.3	—-	—-
Propanol	0.2- 2.0	2	—-	0.7	0.2	1	—-	0.4	—-
MtBE	1.0- 17.0	5	17	—-	—-	1	2.5	10	—-
sec-Butanol	0.1- 2.5	1	—-	0.5	0.1	—-	2.5	0.7	—-
Diisopropyl ether	0.1- 2.0	—-	0.5	0.3	0.1	2	1	—-	—-
iso-Butanol	0.1- 2.0	2	0.5	—-	1	0.1	0.3	—-	—-
EtBE	1.0-18.0	—-	3.5	18	7.5	—-	1	12	—-
t-Pentanol	0.1- 2.0	0.3	1	—-	0.5	0.1	2	—-	—-
Butanol	0.1- 2.0	1	—-	0.3	—-	0.5	0.1	2	—-
TAME	1.0-18.0	—-	3.5	1	18	7.5	12	—-	—-
RFA Gasoline		74.2	64.8	64.7	64.5	64.5	64.8	64.4	100
Total oxygenates		25.8	27.2	27.3	27.5	27.5	27.2	27.6	0

S-4194-ASS-10RF

Oxygenate Quality Control Standard

(without Internal Standard)

13 Analytes, each Wt.% as listed in RFA Gasoline; units: 1x10 mL, 5x10 mL

Name	Wt.%	Name	Wt.%
Methanol	1	Di-isopropyl ether	3
Ethanol	1	iso-Butanol	1
Isopropanol	1	EtBE	3
t-Butanol	1	t-Pentanol	1
Propanol	1	Butanol	1
MtBE	3	TAME	3
sec-Butanol	1	RFA Gasoline	79

S-4196-ASS-10RF

Revised Oxygenate Quality Control Standard (without Internal Standard)

13 Analytes, each Wt.% as listed in RFA Gasoline; units: 1x10mL, 5x10mL

Name	Wt.%	Name	Wt.%
Methanol	1	Di-isopropyl ether	1
Ethanol	1	iso-Butanol	1
Isopropanol	1	EtBE	3
t-Butanol	1	t-Pentanol	1
Propanol	1	Butanol	1
MtBE	3	TAME	3
sec-Butanol	1	RFA Gasoline	81

S-4195-ASS-5RF

Oxygenate Quality Control Standard

(with Internal Standard)

14 Analytes, each Wt.% as listed in RFA Gasoline: units: 1x5mL, 5x5mL

Name	Wt.%	Name	Wt.%
Methanol	1	Di-isopropyl ether	3
Ethanol	1	iso-Butanol	1
Isopropanol	1	EtBE	3
t-Butanol	1	t-Pentanol	1
Propanol	1	Butanol	1
MtBE	3	TAME	3
sec-Butanol	1	RFA Gasoline	79

1,2-Dimethoxyethane (ISTD) combined with the above 14 compounds in a 4 to 100 weight ratio.

S-4197-ASS-10RF

Revised Oxygenate Quality Control Standard

(with Internal Standard)

14 Analytes, each Wt.% as listed in RFA Gasoline; units: 1x10mL, 5x10mL

Name	Wt.%	Name	Wt.%
Methanol	1	Di-isopropyl ether	1
Ethanol	1	iso-Butanol	1
Isopropanol	1	EtBE	3
t-Butanol	1	t-Pentanol	1
Propanol	1	Butanol	1
MtBE	3	TAME	3
sec-Butanol	1	RFA Gasoline	81

1,2-Dimethoxyethane (ISTD) combined with the above 14 compounds in a 4 to 100 weight ratio.

2046.4-40K-10RF
2046.4-1ML

Gasoline Refinery Blank

(with Internal Standard)

1,2-Dimethoxyethane (ISTD), 4 Wt.% in RFA Gasoline or neat; units: 1x10mL, 5x10mL, 1mL neat

S-4187-SET

EPA O-FID Quantitative Calibration Mixes

(without Internal Standard)

4 Analytes, each Wt.% as listed in RFA Gasoline; unit: 5x10mL, one of each Std.

	Analyte Calibr. range	Std. 1 Wt. %	Std. 2 Wt. %	Std. 3 Wt. %	Std. 4 Wt. %	Std. 5 Wt. %
Methanol	0.30-12.00	6.00	12.00	3.00	0.30	9.00
Ethanol	0.30-12.00	0.30	3.00	6.00	9.00	12.00
t-Butanol	0.30-12.00	0.30	6.00	9.00	12.00	3.00
MtBE	0.30-15.00	15.00	7.50	11.25	3.75	0.30
RFA Gasoline		78.40	71.50	70.75	74.95	75.70

S-4188-SET

EPA O-FID Quantitative Calibration Mixes

(with Internal Standard)

5 Analytes, each Wt.% as listed in RFA Gasoline; unit: 5x1mL, one of each Std.

	Analyte Calibr. range	Std. 1 Wt. %	Std. 2 Wt. %	Std. 3 Wt. %	Std. 4 Wt. %	Std. 5 Wt. %
Methanol	0.29-11.40	5.70	11.40	2.85	0.29	8.55
Ethanol	0.29-11.40	0.29	2.85	5.70	8.55	11.40
t-Butanol	0.29-11.40	0.29	5.70	8.55	11.40	2.85
MtBE	0.29-14.29	14.25	7.13	10.69	3.56	0.29
1,2-Dimethoxyethane (ISTD)		5.00	5.00	5.00	5.00	5.00
RFA Gasoline		74.48	67.93	67.31	71.20	71.92

S-4189-ASS-10RF

EPA O-FID Quantitative Calibration Check Standard

(without Internal Standard)

4 Analytes, each Wt.% as listed in RFA Gasoline; units: 1x10mL, 5x10mL

Name	Wt.%	Name	Wt.%
Methanol	4.0	Methyl tert-butyl ether	12.0
Ethanol	8.0	RFA Gasoline	71.0
tert-Butanol	5.0		

S-4190-ASS-5RF

EPA O-FID Quantitative Calibration Check Standard

(with Internal Standard)

5 Analytes, each Wt.% as listed in RFA Gasoline; units: 1x5mL, 5x5mL

Name	Wt.%	Name	Wt.%
Methanol	3.80	Methyl tert-butyl ether	11.40
Ethanol	7.60	1,2-Dimethoxyethane (ISTD)	5.00
tert-Butanol	4.75	RFA Gasoline	67.45

S-4192-5ML

EPA O-FID Spiking Solution

4 Analytes, each Wt.% as listed; units: 1x5ml, 5x5ml neat

Name	Wt.%	Name	Wt.%
Methanol	14.3	tert-Butanol	14.3
Ethanol	28.6	Methyl tert-butyl ether	42.8

3961-10ML **Gasoline Refinery Blank**
RFA Gasoline; units: 1x10mL, 5x10mL neat

ASTM D 5622-95(2005)
Total oxygen in gasoline and methanol by reductive pyrolysis

Standard test method for determination of total oxygen in gasoline and methanol fuels by reductive pyroysis.

This test method covers the quantitative determination of total oxygen in gasoline and methanol fuels by reductive pyrolysis.

S-4185 **Standards for Total Oxygen in Gasoline & MeOH Fuels by Reductive Pyrolysis**
9 Analytes + an RFA gasoline blank, each Oxygenate Wt.% as listed; units: (2+1)x10mL

Cat.No.	Description (2x10 mL, + an RFA gasoline blank)	Oxygenate Wt.%	Unit
S-4185-1	Ethanol in Oxygenate free RFA gasoline	5.0	3x10ml
S-4185-2	Ethanol in Oxygenate free RFA gasoline	10.0	3x10ml
S-4185-3	t-Amyl methyl ether in Oxygenate free RFA gasoline	10.0	3x10ml
S-4185-4	t-Amyl methyl ether in Oxygenate free RFA gasoline	15.0	3x10ml
S-4185-5	Ethyl t-butyl ether in Oxygenate free RFA gasoline	10.0	3x10ml
S-4185-6	Ethyl t-butyl ether in Oxygenate free RFA gasoline	15.00	3x10ml
S-4185-7	Methyl t-butyl ether in Oxygenate free RFA gasoline	10.00	3x10ml
S-4185-8	Methyl t-butyl ether in Oxygenate free RFA gasoline	15.00	3x10ml
S-4185-9	Methanol & t-Butanol in Oxygenate free RFA gasoline	10.0 & 5.0	3x10ml

3961-10ML **Oxygenate Free Gasoline Refinery Blank**
RFA Gasoline; unit : 1x10mL neat

ASTM D 5623-94(2004)e1
Sulfur in light petroleum products by GC

Standard test method for sulfur compounds in light petroleum liquids by gas chromatography and sulfur selective detection

This test method covers the determination of volatile sulfur-containing compounds in light petroleum liquids. The method is applicable to distillates, gasoline motor fuels (including oxygenates) and other petroleum liquids with a final boiling point of approximately 230 °C or lower. The test method is applicable to the determination of individual sulfur species at levels of 0.1 to 100 mg/kg (0.1 to 100 ppm).

Internal standards

The internal standard should not be an original compound in the sample and should be resolved from sulfur compounds in the sample. The following alternative sulfur compounds are recommended and are available as stock solutions from Chiron. An internal standard stock solution should be in the range 0.1 - 1 g S/kg. Typical GC-purities are given.

S-4035 **Diphenylsulfide (99.3 %) in isooctane**
S-4037 **2-Bromothiophene (99.7 %) in isooctane**
S-4036 **3-Chlorothiophene (99.1 %) in isooctane**

Units: 5x1mL ampoules or 10 mL screw-capped bottle

Catalogue No.			Concentration	
Matrix: Isooctane				
Diphenyl sulfide	2-Bromothiophene	3-Chlorothiophene	mgS/g (ppm)	Wt.%
S-4035-0-IO	S-4037-0-IO	S-4036-0-IO	Blank	0
S-4035-K-IO	S-4037-K-IO	S-4036-K-IO	1 000	0.1
S-4035-5K-IO	S-4037-5K-IO	S-4036-5K-IO	5 000	0.5
S-4035-10K-IO	S-4037-10K-IO	S-4036-10K-IO	10 000	1.0

System test mixture

The system test mixture covers the volatility range of interest for the analysis and is made according to ASTM D 4307.

S-4038 **Sulfur System Test Mixture, 10 mL in Toluene/Isooctane (1:9)**

S-4038-1	S-4038-2	
100 ppm	0.1 ppm	Dimethyl sulfide
100 ppm	0.1 ppm	2-Propanethiol
10 000 ppm	10 ppm	Dimethyl disulfide
100 000 ppm	100 ppm	3-Methylthiophene
10 000 ppm	10 ppm	Benzothiophene

Sulfur compounds standards

The sulfur standards are available as test mixtures, neat or as a 1000µg/mL solution of each analyte in isooctane.

S-4039-1ML **ASTM D 5623 Sulfur Compounds Standard I**

14 Analytes, approximately 7,14 % of each (by weight); unit: 1x1mL neat

Prod.nr	Compounds	Prod.nr	Compounds
0184.2	Ethanethiol	0192.4	2-Methyl-1-propanethiol
0185.2	Dimethyl sulfide	0193.4	Diethyl sulfide
0186.1	Carbon disulfide	0194.4	1-Butanethiol
0188.4	2-Methyl-2-propanethiol	0195.5	Dimethyl disulfide
0189.3	1-Propanethiol	0934.5	2-Methylthiophene
0190.3	Ethylmethyl sulfide	0935.5	3-Methylthiophene
0933.4	Thiophene	0196.4	Diethyl disulfide

S-4040-K-IO **ASTM D 5623 Sulfur Compounds Standard II**

7 Analytes, each 1000µg /mL in isooctane; unit: 1x1mL

Prod.nr	Compounds	Prod.nr	Compounds
0946.9	2-Methylbenzothiophene	0199.9	6-Methylbenzothiophene
0947.9	3-Methylbenzothiophene	0951.9	7-Methylbenzothiophene
0198.9	4-Methylbenzothiophene	0907.12	Diphenyl sulfide
0356.9	5-Methylbenzothiophene		

S-4474-500-IO **ASTM D 5623 Sulfur Compounds Standard III, Dimethylbenzothiophenes**
5 Analytes, each approximately 500µg/mL in isooctane; unit: 1x1mL

0952.10	2,3-Dimethylbenzothiophene
0953.10	2,4-Dimethylbenzothiophene
0954.10	2,5-Dimethylbenzothiophene
0953.10	2,6-Dimethylbenzothiophene
0957.10	3,5-Dimethylbenzothiophene

ASTM D 5739-06
Oil spill analysis by GC

NEW

Standard practice for oil spill source – Identification by gas chromatography and positive ion electron impact low resolution mass spectrometry

The scope of the method is to use GC-MS to analyse and compare petroleum oil spills and suspected sources.

Naphthalenes (C2-C4), dibenzothiophenes (C0-C3), phenanthrenes/anthracene (C0-C3), steranes (14α(H) and 14β(H)), triterpanes, and alkanes are identified.

The following products are recommended and are carried by Chiron:

1027.12-500MG **Perfluorotri-n-butylamine (PFTBA, "Heptacosa")**
for tuning the mass spectrometer
Mass spec. grade 500 mg

S-4041-015-10CY **Resolution Test Mixture for ASTM D 5739**
150 ng/mL of each in pesticide grade cyclohexane, 10mL

Pristane
Phytane
n-Heptadecane
n-Octane

S-4042-015-10CY **Mass Discrimination Test Mixture for ASTM D 5739**
150 ng/mL in pesticide grade cyclohexane, 10mL

Naphthalene
Fluoranthene
Benzo[ghi]perylene

Reference compounds for ASTM D 5739

Compound Group	m/z	Available from Chiron, see the Compounds section
Naphthalenes, C2	156	All possible dimethyl- and ethyl- isomers are available
Naphthalenes, C3	170	16 Isomers available
Naphthalenes, C4	184	4 Isomers available: 2-Butylnaphthalene Eudalene 1,4,6,7-Tetramethylnaphthalene 1,2,5,6-Tetramethylnaphthalene
Dibenzothiophene, C0	184	Dibenzothiophene
Dibenzothiophenes, C1	198	All monomethyl-isomers available
Dibenzothiophenes, C2	212	11 Isomers of dimethyl- and ethyldibenzothiophenes
Dibenzothiophenes, C3	226	8 Isomers of trimethyl- and propyldibenzothiophenes
Phenanthrene, C0	178	Phenanthrene
Phenanthrenes, C1	192	All four possible monomethyl-isomers available
Phenanthrenes, C2	206	All dimethyl and two ethylphenanthrenes available
Phenanthrenes, C3	220	9 Trimethyl and ethyl-methyl isomers available
Anthracene, C0	178	Anthracene
Anthracene, C1	192	All three possible monomethyl-isomers available
Anthracene, C2	206	8 Isomers available
Anthracene, C3	220	1,2,4-Trimethylanthracene
Steranes, 14α(H)	217	5α(H),14α(H),17α(H),(20S)-Cholestane (C27) 5α(H),14α(H),17α(H),(20R)-Cholestane (C27) 24-Methyl-5α(H),14β(H),17β(H),(20R)-cholestane(C28) 24-Ethyl-5α(H),14α(H),17α(H),(20S)-cholestane (C29) 24-Ethyl-5α(H),14α(H),17α(H),(20R)-cholestane (C29)
Steranes, 14β(H)	218	5α(H),14β(H),17β(H),(20R)-Cholestane (C27) 24-Ethyl-5α(H),14β(H),17β(H),(20R)-cholestane (C29)
Triterpanes	191	17α(H),21β(H)-Hopane (C30) 17β(H),21α(H)-Hopane (C30) 17β(H),21β(H)-Hopane (C30) (Several others are available, see the “hopane” sections)
Alkanes	85	Available from C5 to C60
Alkanes and Acyclic isoprenoids	183	See “head to tail” and “tail to tail” isoprenoids
Benzonaphthothiophenes	234	11 Isomers available
Tri-aromatic steranes	231	6 compounds available
Norhopanes	177	6 Trisnor-, 2 bisnor- and 6 norhopanes are available
Methylhopanes	205	NEW: 2- and 3-methylhopanes available
Pyrene/Fluoranthene	202	Both available
Methylpyrenes	216	8 alkylpyrene from C01 to C4
Fluorenes	166	Fluorene and 8 alkylfluorenes available
Bicyclonaphthalenes	208	

Mixes are available on request

ASTM D 5769-04
Benzene, toluene, and total aromatics in finished gasolines by GC-MS

Standard test method for determination of benzene, toluene, and total aromatics in finished gasolines by gas chromatography/mass spectrometry

This test method covers the determination of benzene, toluene, other specified individual aromatic compounds, and total aromatics in finished motor gasoline, including gasolines containing oxygenated blending components, by gas chromatography-mass spectrometry (GC-MS).

Chiron AS offers different versions for the standard for calibration and identification.

S-4120-10ML

Daily Quality Control Standard
(without Internal Standard)
14 Analytes, each Wt.% as listed; units: 1x10 mL, 5x10 mL neat

Name	Wt.%	Name	Wt.%
n-Hexane	12	Toluene	9
n-Heptane	17	m-Xylene	3
n-Octane	17	o-Xylene	3
n-Decane	12	Ethylbenzene	3
n-Dodecane	5	1,2,4-Trimethylbenzene	3
2,2,4-Trimethylpentane	12	1,2,4,5-Tetramethylbenzene	2
Benzene	1	Naphthalene	1

The Daily Quality Control Standard is also available with different Internal Standard compositions added. Those options are listed further on in this section.

1502.10-100-IO

Sensitivity Test Solution
1,4-Diethyl benzene, 100 µg/mL in isooctane; units: 1x1mL, 5x1mL

1269.9-30K-IO

Fragmentation Pattern Standard
1,2,3-Trimethylbenzene, 3,0 Wt.% in isooctane; units: 1x1mL, 5x1mL

S-4199-30K-IO

Resolution Standard
2 Analytes, each 3,0 Wt.% in isooctane; units: 1x1mL, 5x1mL

1,3,5-Trimethylbenzene
1-Methyl-2-ethylbenzene

1264.7-30K-IO

Mass Scan Range Standard
Toluene 3,0 Wt.% in isooctane; units: 1x1mL, 5x1mL

S-4178 / S-4179

Aromatics Calibration Standards Kit
(without Internal Standard)
24 Analytes, each Vol.% as listed in isooctane; units: 5x10mL Set, one of each Std. 1-5 + opt. 1x1 mL (Std. 6)

Standard 6 of the calibration set is optional. It has been added in order to improve the linearity of the calibration curve. Use of the sixth standard provides an additional calibration point that is desirable when the calibration curve is developed using a quadric fit.

	S-4178 (Std. 1-5)					**S-4179**
Analyte	**Std. 1**	**Std. 2**	**Std. 3**	**Std. 4**	**Std. 5**	**Std. 6**
	Vol.%	**Vol.%**	**Vol.%**	**Vol.%**	**Vol.%**	**Vol.%**
Benzene	3	1.50	0.75	0.375	0.1875	2.25
Toluene	19	9.50	4.75	2.375	1.1875	15
Ethylbenzene	5	2.50	1.25	0.625	0.3125	3.75
m-Xylene	6	3.00	1.50	0.750	0.3750	4.50
p-Xylene	6	3.00	1.50	0.750	0.3750	4.50
o-Xylene	6	3.00	1.50	0.750	0.3750	4.50
Isopropylbenzene	3	1.50	0.75	0.375	0.1875	2.25
n-Propylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1-Methyl-3-ethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1-Methyl-4-ethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,3,5-Trimethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1-Methyl-2-ethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,2,4-Trimethylbenzene	5	2.50	1.25	0.625	0.3125	3.75
1,2,3-Trimethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
Indan	3	1.50	0.75	0.375	0.1875	2.25
1.4-Diethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
n-Butylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,2-Diethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,2,4,5-Tetramethylbenzene	2	1.00	0.50	0.250	0.1250	4.0
1,2,3,5-Tetramethylbenzene	2	1.00	0.50	0.250	0.1250	1.5
Naphthalene	2	1.00	0.50	0.250	0.1250	1.5
Pentamethylbenzene	2	1.00	0.50	0.250	0.1250	1.5
1-Methylnaphthalene	2	1.00	0.50	0.250	0.1250	1.5
2-Methylnaphthalene	2	1.00	0.50	0.250	0.1250	1.5

The calibration set is supplied with a datasheet listing the weight% for each component in the formulation.

S-4129-10ML

3 Deuterated Compounds Internal Standard Mix

3 Analytes, each Wt.% as listed; units: 1x10mL, 5x10mL neat

Name	**Wt.%**	**Name**	**Wt.%**
Benzene-d6	39.7	Naphthalene-d8	20.9
Ethylbenzene-d10	39.3		

S-4161-10ML

4 Deuterated Compounds Internal Standard Mix

4 Analytes, each Wt.% as listed; units: 1x10 mL, 5x10mL neat

Name	**Wt.%**	**Name**	**Wt.%**
Benzene-d6	16.7	Naphthalene-d8	8.8
Ethylbenzene-d10	16.5	Toluene-d8	57.9

S-4251/ S-4252

Aromatics Calibration Standards Kit

(3 Internal Standard Version)
24 Analytes + 3 ISTD, each Vol.% as listed in isooctane; units: 5x1mL Set, one of each Std. 1-5 + opt. 1x1mL (Std. 6)

To these calibration standards are 3 deuterated Internal Standards added. Standard 6 of the calibration set is optional. It has been added in order to improve the linearity of the calibration curve. Use of the sixth standard provides an additional calibration point that is desirable when the calibration curve is developed using a quadric fit.

Analyte	**S-4251** (Std.1-5) Std. 1 Vol.%	Std. 2 Vol.%	Std. 3 Vol.%	Std. 4 Vol.%	Std. 5 Vol.%	**S-4252** Std. 6 Vol.%
Benzene	3	1.50	0.75	0.375	0.1875	2.25
Toluene	19	9.50	4.75	2.375	1.1875	15
Ethylbenzene	5	2.50	1.25	0.625	0.3125	3.75
m-Xylene	6	3.00	1.50	0.750	0.3750	4.50
p-Xylene	6	3.00	1.50	0.750	0.3750	4.50
o-Xylene	6	3.00	1.50	0.750	0.3750	4.50
Isopropylbenzene	3	1.50	0.75	0.375	0.1875	2.25
n-Propylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1-Methyl-3-ethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1-Methyl-4-ethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,3,5-Trimethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1-Methyl-2-ethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,2,4-Trimethylbenzene	5	2.50	1.25	0.625	0.3125	3.75
1,2,3-Trimethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
Indan	3	1.50	0.75	0.375	0.1875	2.25
1.4-Diethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
n-Butylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,2-Diethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,2,4,5-Tetramethylbenzene	2	1.00	0.50	0.250	0.1250	4.0
1,2,3,5-Tetramethylbenzene	2	1.00	0.50	0.250	0.1250	1.5
Naphthalene	2	1.00	0.50	0.250	0.1250	1.5
Pentamethylbenzene	2	1.00	0.50	0.250	0.1250	1.5
1-Methylnaphthalene	2	1.00	0.50	0.250	0.1250	1.5
2-Methylnaphthalene	2	1.00	0.50	0.250	0.1250	1.5

(S-4129)

3 Deuterated Compounds, Internal Standard Mixture

Benzene-d6	2	2	2	2	2	2
Ethylbenzene-d10	2	2	2	2	2	2
Naphthalene-d8	1	1	1	1	1	1

The calibration set is supplied with a datasheet listing the weight% for each component in the formulation.

S-4130-10ML

Daily Quality Control Standard

(with 3 Deuterated Compounds Internal Standard)
14 Analytes + 3 ISTD, each Wt.% as listed; units: 1x10mL, 5x10mL neat

Name	Wt.%	Name	Wt.%
n-Hexane	12	Toluene	9
n-Heptane	17	m-Xylene	3
n-Octane	17	o-Xylene	3
n-Decane	12	Ethylbenzene	3
n-Dodecane	5	1,2,4-Trimethylbenzene	3
2,2,4-Trimethylpentane	12	1,2,4,5-Tetramethylbenzene	2
Benzene	1	Naphthalene	1

The 3 Deuterated Compounds Internal Standard Mixture S-4129 is mixed with the 14 Analytes Daily Quality Control Standard S-4130 in a 5 to 100 weight ratio.

S-4258/ S-4259

Aromatics Calibration Standards Kit

(4 Internal Standard Version)
24 Analytes + 4 ISTD, each Vol.% as listed in isooctane; units: 5x1mL Set, one of each Std. 1-5 + opt. 1x1mL (Std. 6)

To these calibration standards are 4 deuterated Internal Standards added. ASTM D 5769-98 recommends the use of a fourth internal standard toluene-d8. The use of toluene-d8 improves the analytical results for toluene. Standard 6 of the calibration set is optional. It has been added in order to improve the linearity of the calibration curve. Use of the sixth standard provides an additional calibration point that is desirable when the calibration curve is developed using a quadric fit.

	S-4258 (Std. 1-5)					**S-4259**
Analyte	**Std. 1**	**Std. 2**	**Std. 3**	**Std. 4**	**Std. 5**	**Std. 6**
	Vol.%	**Vol.%**	**Vol.%**	**Vol.%**	**Vol.%**	**Vol.%**
Benzene	3	1.50	0.75	0.375	0.1875	2.25
Toluene	19	9.50	4.75	2.375	1.1875	15
Ethylbenzene	5	2.50	1.25	0.625	0.3125	3.75
m-Xylene	6	3.00	1.50	0.750	0.3750	4.50
p-Xylene	6	3.00	1.50	0.750	0.3750	4.50
o-Xylene	6	3.00	1.50	0.750	0.3750	4.50
Isopropylbenzene	3	1.50	0.75	0.375	0.1875	2.25
n-Propylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1-Methyl-3-ethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1-Methyl-4-ethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,3,5-Trimethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1-Methyl-2-ethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,2,4-Trimethylbenzene	5	2.50	1.25	0.625	0.3125	3.75
1,2,3-Trimethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
Indan	3	1.50	0.75	0.375	0.1875	2.25
1,4-Diethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
n-Butylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,2-Diethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,2,4,5-Tetramethylbenzene	2	1.00	0.50	0.250	0.1250	4.0
1.2.3.5-Tetramethylbenzene	2	1.00	0.50	0.250	0.1250	1.5
Naphthalene	2	1.00	0.50	0.250	0.1250	1.5
Pentamethylbenzene	2	1.00	0.50	0.250	0.1250	1.5
1-Methylnaphthalene	2	1.00	0.50	0.250	0.1250	1.5
2-Methylnaphthalene	2	1.00	0.50	0.250	0.1250	1.5

(S-4161)

4 Deuterated Compounds, Internal Standard Mixture

Benzene-d6	2	2	2	2	2	2
Ethylbenzene-d10	2	2	2	2	2	2
Naphthalene-d8	1	1	1	1	1	1
Toluene-d8	7	7	7	7	7	7

The calibration set is supplied with a datasheet listing the weight% for each component in the formulation.

S-4249-10ML

Daily Quality Control Standard

(with 4 Deuterated Compounds Internal Standard)
14 Analytes + 4 ISTD, each Wt.% as listed; units: 1x10mL, 5x10mL neat

Name	Wt.%	Name	Wt.%
n-Hexane	12	Toluene	9
n-Heptane	17	m-Xylene	3
n-Octane	17	o-Xylene	3
n-Decane	12	Ethylbenzene	3
n-Dodecane	5	1,2,4-Trimethylbenzene	3
2,2,4-Trimethylpentane	12	1,2,4,5-Tetramethylbenzene	2
Benzene	1	Naphthalene	1

The 4 Deuterated Compounds Internal Standard Mixture S-4161 is mixed with the 14 Analytes Daily Quality Control Standard S-4120 in a 12 to 100 weight ratio.

S-4228-10ML

4 Fluorinated Internal Standard Mix

4 Analytes, each Wt.% as listed; units: 1x10mL, 5x10mL neat

Name	Wt.%	Name	Wt.%
Fluorobenzene	16.7	1-Fluoronaphthalene	8.8
4-Ethyl-1-fluorobenzene	16.5	3-Fluorotoluene	57.9

S-4269-10ML

3 Fluorinated Internal Standard Mix

3 Analytes, each Wt.% as listed; units: 1x10mL, 5x10mL neat

Name	Wt.%	Name	Wt.%
Fluorobenzene	39.7	1-Fluoronaphthalene	20.9
4-Ethyl-1-fluorobenzene	39.3		

S-4260/ S-4261

Aromatics Calibration Standards Kit

(3 Internal Standard Version)
24 Analytes + 3 ISTD, each Vol.% as listed in isooctane; unit: 5x1mL Set, one of each Std. 1-5 + opt. 1x1mL (Std. 6)

To these calibration standards are 3 fluorinated Internal Standards added.
Standard 6 of the calibration set is optional. It has been added in order to improve the linearity of the calibration curve. Use of the sixth standard provides an additional calibration point that is desirable when the calibration curve is developed using a quadric fit.

Analyte	S-4260 (Std. 1-5) Std. 1 Vol.%	Std. 2 Vol.%	Std. 3 Vol.%	Std. 4 Vol.%	Std. 5 Vol.%	S-4261 Std. 6 Vol.%
Benzene	3	1.50	0.75	0.375	0.1875	2.25
Toluene	19	9.50	4.75	2.375	1.1875	15
Ethylbenzene	5	2.50	1.25	0.625	0.3125	3.75
m-Xylene	6	3.00	1.50	0.750	0.3750	4.50
p-Xylene	6	3.00	1.50	0.750	0.3750	4.50
o-Xylene	6	3.00	1.50	0.750	0.3750	4.50
Isopropylbenzene	3	1.50	0.75	0.375	0.1875	2.25
n-Propylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1-Methyl-3-ethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1-Methyl-4-ethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,3,5-Trimethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1-Methyl-2-ethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,2,4-Trimethylbenzene	5	2.50	1.25	0.625	0.3125	3.75
1,2,3-Trimethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
Indan	3	1.50	0.75	0.375	0.1875	2.25
1.4-Diethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
n-Butylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,2-Diethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1,2,4,5-Tetramethylbenzene	2	1.00	0.50	0.250	0.1250	4.0
1,2,3,5-Tetramethylbenzene	2	1.00	0.50	0.250	0.1250	1.5
Naphthalene	2	1.00	0.50	0.250	0.1250	1.5
Pentamethylbenzene	2	1.00	0.50	0.250	0.1250	1.5
1-Methylnaphthalene	2	1.00	0.50	0.250	0.1250	1.5
2-Methylnaphthalene	2	1.00	0.50	0.250	0.1250	1.5
(S-4269) **3 Fluorinated Compounds, Internal Standard Mixture**						
Fluorobenzene	2	2	2	2	2	2
4-Ethyl-1-fluorobenzene	2	2	2	2	2	2
1-Fluoronaphthalene	1	1	1	1	1	1

The calibration set is supplied with a datasheet listing the weight% for each component in the formulation.

S-4150-10ML **Daily Quality Control Standard**

(with 3 Fluorinated Compounds Internal Standard)

14 Analytes + 3 ISTD, each Wt.% as listed; units: 1x10mL, 5x10mL neat

Name	Wt.%	Name	Wt.%
n-Hexane	12	Toluene	9
n-Heptane	17	m-Xylene	3
n-Octane	17	o-Xylene	3
n-Decane	12	Ethylbenzene	3
n-Dodecane	5	1,2,4-Trimethylbenzene	3
2,2,4-Trimethylpentane	12	1,2,4,5-Tetramethylbenzene	2
Benzene	1		
Naphthalene	1		

The 3 Fluorinated Compounds Internal Standard Mixture S-4269 is mixed with the 14 Analytes Daily Quality Control S-4120 in a 5 to 100 weight ratio.

S-4262/ S-4263

Aromatics Calibration Standards Kit

(4 Internal Standard Version)
24 Analytes + 4 ISTD, each Vol.% as listed in isooctane; units: 5x1 mL Set, one of each Std. 1-5 + opt. 1x1 mL (Std. 6)

To these calibration standards are 4 fluorinated Internal Standards added.
ASTM D5769-98 recommends the use of a fourth internal standard. The use of an extra internal standard with physical properties similar to toluene improves the analytical results for toluene.
Standard 6 of the calibration set is optional. It has been added in order to improve the linearity of the calibration curve. Use of the 6th standard provides an additional calibration point that is desirable when the calibration curve is developed using a quadric fit.

Analyte	**S-4260** (Std. 1-5) Std. 1 Vol.%	Std. 2 Vol.%	Std. 3 Vol.%	Std. 4 Vol.%	Std. 5 Vol.%	**S-4261** Std. 6 Vol.%
Benzene	3	1.50	0.75	0.375	0.1875	2.25
Toluene	19	9.50	4.75	2.375	1.1875	15
Ethylbenzene	5	2.50	1.25	0.625	0.3125	3.75
m-Xylene	6	3.00	1.50	0.750	0.3750	4.50
p-Xylene	6	3.00	1.50	0.750	0.3750	4.50
o-Xylene	6	3.00	1.50	0.750	0.3750	4.50
Isopropylbenzene	3	1.50	0.75	0.375	0.1875	2.25
n-Propylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1-Methyl-3-ethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1-Methyl-4-ethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1.3.5-Trimethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1-Methyl-2-ethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1.2.4-Trimethylbenzene	5	2.50	1.25	0.625	0.3125	3.75
1.2.3-Trimethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
Indan	3	1.50	0.75	0.375	0.1875	2.25
1.4-Diethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
n-Butylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1.2-Diethylbenzene	3	1.50	0.75	0.375	0.1875	2.25
1.2.4.5-Tetramethylbenzene	2	1.00	0.50	0.250	0.1250	4.0
1.2.3.5-Tetramethylbenzene	2	1.00	0.50	0.250	0.1250	1.5
Naphthalene	2	1.00	0.50	0.250	0.1250	1.5
Pentamethylbenzene	2	1.00	0.50	0.250	0.1250	1.5
1-Methylnaphthalene	2	1.00	0.50	0.250	0.1250	1.5
2-Methylnaphthalene	2	1.00	0.50	0.250	0.1250	1.5
(S-4228) 4 Fluorinated Compounds, Internal Standard Mixture						
Fluorobenzene	2	2	2	2	2	2
4-Ethyl-1-fluorobenzene	2	2	2	2	2	2
1-Fluoronaphthalene	1	1	1	1	1	1
3-Fluorotoluene	7	7	7	7	7	7

The calibration set is supplied with a datasheet listing the weight% for each component in the formulation.

S-4248-10ML

Daily Quality Control Standard
(with 4 Fluorinated Compounds Internal Standard)
14 Analytes + 4 ISTD, each Wt.% as listed; units: 1x10mL, 5x10mL neat

Name	Wt.%	Name	Wt.%
n-Hexane	12	Toluene	9
n-Heptane	17	m-Xylene	3
n-Octane	17	o-Xylene	3
n-Decane	12	Ethylbenzene	3
n-Dodecane	5	1,2,4-Trimethylbenzene	3
2,2,4-Trimethylpentane	12	1,2,4,5-Tetramethylbenzene	2
Benzene	1	Naphthalene	1

The 4 Fluorinated Compounds Internal Standard Mixture S-4228 is mixed with the 14 Analytes Daily Quality Control Standard S-4120 in a 12 to 100 weight ratio.

ASTM D 5986-96(2006) Oxygenates, benzene, toluene, C8-C12 aromatics and total aromatics in gasoline

Standard test method for determination of oxygenates, benzene, toluene, C8-C12 aromatics and total aromatics in finished gasoline by gas chromatography/fourier transform infrared spectroscopy.

This test method covers the quantitative determination of oxygenates: methyl-t-butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl-t-butyl ether (ETBE), t-amylmethyl ether (TAME), methanol (MeOH), ethanol (EtOH), 2-propanol (2-PrOH), t-butanol (t-BuOH), i-propanol (i-PrOH), 2-butanol (2-BuOH), i-butanol (i-BuOH), 1-butanol (1-BuOH), benzene, toluene and C8-C12 aromatics, and total aromatics in finished motor gasoline by gas chromatography/Fourier Transform infrared spectroscopy (GC/FTIR).

S-4162-10ML

Daily Quality Control Standard
(without Internal Standard)
13 Analytes, each Wt.% as listed; units: 1x10mL, 5x10mL neat

Name	Wt.%	Name	Wt.%
n-Hexane	12	Toluene	9
n-Heptane	17	m-Xylene	3
n-Octane	17	o-Xylene	3
n-Decane	12	Ethylbenzene	3
n-Dodecane	5	1,2,4-Trimethylbenzene	3
2,2,4,-Trimethylpentane	12	1,2,4,5-Tetramethylbenzene	3
Benzene	1		

ASTM D 6293-98(2003)e1
O-PONA in low-olefin spark ignition engine fuels

Standard test method for oxygenates and paraffin, olefin, naphthene, aromatic (O-PONA) hydrocarbon types in low-olefin spark ignition engine fuels by gas chromatography.

This test method provides for the quantitative determination of oxygenates, paraffins, olefins, naphthenes, and aromatics in low-olefin spark-ignition engine fuels by multidimensional gas chromatography.

S-4131-1ML

Validation mixture for oxygenates and PONA

33 Analytes, each Wt.% as listed; units: 1x1mL, 5x1mL neat
Use this standard to monitor and make adjustments to the total operation of the system.

Name	Wt.%	Name	Wt.%
Cyclopentane	1.5	Benzene	2.5
n-Pentane	1.5	Toluene	2.5
Cyclohexane	2.0	trans-Decahydronaphtalene	3.5
2.3-Dimethylbutane	2.0	n-Tetradecane	2.0
n-Hexane	2.0	Ethylbenzene	3.5
1-Hexene	1.5	o-Xylene	3.0
Methylcyclohexane	3.5	n-Propylbenzene	3.5
4-Methyl-1-hexene	1.5	1,2,4-Trimethylbenzene	3.0
n-Heptane	3.0	1,2,3-Trimethylbenzene	2.0
cis-1,2-Dimethylcyclohexane	4.5	1,2,4,5-Tetramethylbenzene	2.0
2.2.4-trimethylpentane	4.0	Pentamethylbenzene	2.5
n-Octane	4.0	Ethanol	5.0
cis.cis-1,2,4-Trimethylcyclohexane	3.5	tert-Butanol	4.0
n-Nonane	3.0	MTBE (methyl tert-butyl ether)	8.0
n-Decane	3.5	ETBE (ethyl tert-butyl ether)	3.0
n-Undecane	2.0	TAME (tert-amyl methyl ether)	5.0
n-Dodecane	2.0		

S-4132-ASS-MX

Olefin mixture

5 Analytes, each Wt.% as listed in n-hexane/n-heptane = 1:1; units: 1x1mL, 5x1mL

Use this standard to adjust the olefin and Ether-Alcohol-Aromatic (EAA) trap temperatures so that C5 through C9 olefins are quantitative determined.

Name	Wt.%
1-Pentene	5.0
1-Hexene	2.0
1-Heptene	2.0
1-Octene	2.0
1-Nonene	3.0

S-4133-30K-MX

Paraffin mixture

2 Analytes, each 3 Wt.% in n-Hexane/n-Heptane = 1:1; units: 1x1mL, 5x1mL

Use this standard to adjust the olefin and Ether-Alcohol-Aromatic (EAA) trap temperatures.

Name	Wt.%
n-Nonane	3.0
n-Decane	3.0

ASTM D 6296-98(2003)e1 Quantitative determination of olefins

Standard test method for total olefins in spark-ignition engine fuels by multidimensional gas chromatography.

This test method provides for the quantitative determination of total olefins in the C4 to C10 range in spark-ignition engine fuels or related hydrocarbons streams, such as naphthas and cracked naphthas.

2151.5-50K-IO

Set Up Mixture 1

MTBE (Methyl tert-butyl ether), 5 Wt.% in isooctane; unit: 1x1mL

Use this standard to verify that all instrument components, temperatures, and cut times are accurate.

2141.6-50K-IO

Set Up Mixture 2

ETBE (Ethyl tert-butyl ether), 5 Wt.% in isooctane; unit: 1x1mL

Use this standard to verify that all instrument components, temperatures, and cut times are accurate.

S-4154-ASS-IO

Calibration standard with MTBE

9 Analytes, each Wt.% as listed in isooctane; units: 1x1mL, 5x1mL

Name	Wt.%	Name	Wt.%
Pentene	1.0	Decene	1.0
Hexene	1.0	Undecane	1.0
Heptene	1.0	Dodecane	1.0
Octene	1.0	Isooctane	87.0
Nonene	1.0	MTBE	5.0

S-4155-ASS-IO

Calibration standard with ETBE

10 Analytes, each Wt.% as listed in isooctane; units: 1x1mL, 5x1mL

Name	Wt.%	Name	Wt.%
Pentene	1.0	Decane	1.0
Hexene	1.0	Undecane	1.0
Heptene	1.0	Dodecane	1.0
Octene	1.0	Isooctane	86.0
Nonene	1.0	ETBE	5.
Decene	1.0		

ASTM D 6313-99
Sulfur in aromatic compounds

Standard test method for total sulfur in aromatic compounds by hydrogenolysis and sulfur specific difference photometry

This test method covers the determination of sulfur in aromatic hydrocarbons and related chemicals having typical sulfur concentrations from 0.005 to 10 mg/kg (0.05 to 100 ppm).

S-4057-K-IO

Sulfur Calibration Stock Solution

Thiophene, 1000 µg/mL in Toluene; unit: 5x1mL ampoules

Please request for diluted samples in the range 1 to 1000 ng/mL.

ASTM D 6352-04e1
Boiling range distribution of petroleum distillate fractions by GC

Standard test method for boiling range distribution of petroleum distillates in boiling range from 174 °C to 700 °C by gas chromatography.

This test method covers the determination of the boiling range distribution of petroleum distillate fractions. The test method is applicable to petroleum distillates fractions having an initial boiling point greater than 174 °C (345 °F) and a final boiling point of less than 700 °C (1292 °F) (C10 – C90) at atmospheric pressure as measured by this method.

S-4112

Petrochemical Calibration Mixture C6-C44

17 Analytes, each 6,25 Wt.% in carbon disulfide (CS_2); units: 100mg, 1g neat

Use for assessing column resolution as well as for quantitative analyses.

n-Hexane	C6	n-Octadecane	C18
n-Heptane	C7	n-Eicosane	C20
n-Octane	C8	n-Tetracosane	C24
n-Nonane	C9	n-Octacosane	C28
n-Decane	C10	n-Dotriacotane	C32
n-Undecane	C11	n-Hexatriacontane	C36
n-Dodecane	C12	n-Tetracontane	C40
n-Tetradecane	C14	n-Tetratetracontane	C44
n-Hexadecane	C16		

S-4149-500-MX
S-4149-500-5MX

Hydrocarbon Window Defining Standard C8-C40

35 Analytes, each 500 μg/mL in CS_2:CH_2Cl_2 (3:1); units: 1x1mL, 1x5mL

Octane	C8	Nonadecane	C19	Triacontante	C30
Nonane	C9	Phytane	C20	Hentriacontane	C31
Decane	C10	Eicosane	C20	Dotriacontane	C32
Undecane	C11	Heneicosane	C21	Tritriacontane	C33
Dodecane	C12	Docosane	C22	Tetratriacontane	C34
Tridecane	C13	Tricosane	C23	Pentatriacontane	C35
Tetradecane	C14	Tetracosane	C24	Hexatriacontane	C36
Pentadecane	C15	Pentacosane	C25	Heptatriacontane	C37
Hexadecane	C16	Hexacosane	C26	Octratriacontane	C38
Heptadecane	C17	Heptacosane	C27	Nonatriacontane	C39
Octadecane	C18	Octacosane	C28	Tetracontane	C40
Pristane	C19	Nonacosane	C29		

S-4151

Column Resolution Test Mix C16-C18

2 Analytes, each 1 % v/v in n-Octane; unit : 5x1mL

n-Hexadecane	C16
n-Octadecane	C18

ASTM D 6379-04
Aromatic hydrocarbon types in aviation fuels and petroleum distillates by HPLC refractive index

Standard test method for determination of aromatic hydrocarbon types in aviation fuels and petroleum distillates – high performance liquid chromatography method with refractive index detection.

This test method covers a high performance liquid chromatographic test method for the determination of mono-aromatic and di-aromatic hydrocarbon contents in aviation kerosenes and petroleum distillates boiling in the range from 50 °C to 300 °C, such as Jet A or Jet A-1 fuels.

S-4266-ASS-HP

IP 436-98 Resolution Standard

3 Analytes, each Wt.% as listed in n-Heptane; units: 1x5mL, 5x5mL

Cyclohexane	10.0 mg/mL
o-Xylene	5.0 mg/mL
1-Methylnaphtalene	0.5 mg/mL

S-4267-SET

IP 436-98 Calibration Curve

4 Analytes, each Wt.% as listed in n-Heptane; unit: 4x1mL, one of each Std.

Analyte	**Std. 1 (mg/mL)**	**Std.2 (mg/mL)**	**Std.3 (mg/mL)**	**Std.4 (mg/mL)**
Cyclohexane	50	20	5	1
o-Xylene	150	50	10	1
1-Methylnaphthalene	50	10	2	0.5

ASTM D 6550-05
Olefin content of gasoline by SFC

Standard test method for determination of olefin content of gasolines by supercritical-fluid chromatography.

This test method is used for the determination of the total amount of olefins in blended motor gasolines and gasoline blending stocks by supercritical-fluid chromatography (SFC).

S-4138-1ML **Calibatation mixture for olefines**

15 Analytes, each Wt. % as listed; units: 1x1ml, 5x1ml

Name:	Wt. %
1-Nonene	2.5
Cyclohexene	5.0
1-Hexene	5.0
1-Octene	5.0
1-Decene	5.0
2-Methyl-1,3-butadiene	5.0
4-Methyl-1-pentene	5.0
1,5-Hexadiene	3.0
3-Methyl-1,3-pentadiene	2.0
2-Methyl-1-butene	25.0
2-Methyl-2-pentene	10.0
1-Heptene	10.0
2-Methyl-1-octene	2.5
2-Methyl-1-heptene	5.0
5-Methyl-1-hexene	10.0

ASTM D 6584-07
Glycerine content by GC

NEW

Test method for determination of free and total glycerine in B-100 biodiesel methyl esters by gas chromatography

This test method provides for the quantitative determination of free and total glycerine in B-100 methyl esters by gas chromatography. The range of the detection for free glycerine is 0.005 to 0.05 mass %, and total glycerine from 0.05 to 0.5 mass %.

Reference: EN 14105:2003, page 42.

Derivatizing agent

1941.6-1ML **N-methyl-N-trimethylsilyltrifluoroacetamide (MSTFA)**

1941.6-5G [10416-59-6] 1 mL, 5g neat

Stock solutions

3644.3-500-10PY **Glycerine** (Glycerol, [56-81-5]) stock solution
0.5mg/ml in dry pyridine 10 mL

3645.21-5K-10PY **1-Monooleoylglycerol** (monoolein, [111-03-5]) stock solution
5 mg/mL in dry pyridine 10 mL

3646.39-5K-10PY **1,3-Dioleoylglycerol** (diolein, [2465-32-9]) stock solution
5 mg/mL in dry pyridine 10 mL

3647.57-5K-10PY **1,2,3-Trioleoylglycerol** (triolein, [122-32-7]) stock solution
5 mg/mL each in dry pyridine 10 mL

Internal standards

3642.4-K-10PY **Internal Standard No. 1** ((S)-(-)-1,2,4-Butanetriol, [42890-76-6]) stock solution
1 mg/mL in dry pyridine 10 mL

3643.33-8K-10PY **Internal Standard No. 2** (1,2,3-Tridecanolylglycerol)
(tricaprin, [621-71-6]) stock solution
8 mg/mL in dry pyridine 10 mL

Calibration solutions

Calibration solution	1	2	3	4	Syringe, µL
µL of glycerol solution	10	30	50	70	100
µL of monoolein solution	20	50	100	150	200
µL of diolein solution	10	20	40	70	100
µL of triolein solution	10	20	40	70	100
µL of internal standard sol. No.1	100	100	100	100	100
µL of internal standard sol. No.2	100	100	100	100	100

To be prepared daily from the above solutions

Monoglycerides

S-4475-10K-10PY **Monoglycerides**
4 analytes, each 10 mg/mL in dry pyridine; unit: 1x10 mL

3648.19	Monopalmitoylglycerol (monopalmitin)	[542-44-9]
3649.21	Monostearoylglycerol (monostearin)	[123-94-4]
3650.21	Monooleoylglycerol (monoolein)	[111-03-5]
3833.21	Monolinoylglycerol (monolinolein)	[2277-28-3]

ASTM D 6591-06
Aromatic hydrocarbon types in middle distillates by HPLC

Standard test method for determination of aromatic hydrocarbon types in middle distillates - high performance liquid chromatography with refractive index detection.

This test method is used for the determination of monoaromatic, diaromatic and polyaromatic hydrocarbon contents in diesel fuels and petroleum distillates boiling in the range of 150 – 400 °C using HPLC with refractive index detection.

S-4268-ASS-5HP

IP 391-95 Performance Standard

4 Analytes, each Wt.% as listed in n-Heptane; units: 1x5mL, 5x5mL

Cyclohexane	10.0 mg/mL
o-Xylene	5.0 mg/mL
Dibenzothiophene	0.5 mg/mL
9-Methylanthracene	0.5 mg/mL

S-4269-SET

IP 391-95 Calibration Curve

4 Analytes, each Wt.% as listed in n-Heptane; unit: 4x1mL, one of each Std.

Analyte	Std. 1 (mg/mL)	Std.2 (mg/mL)	Std.3 (mg/mL)	Std.4 (mg/mL)
Cyclohexane	50	20	5	1
o-Xylene	40	10	2.5	0.5
Methylnaphthalene	40	10	2.5	0.2
Phenanthrene	4	2	0.5	0.1

ASTM D 6729-04
Hydrocarbon compounds in spark ignition engine fuels by GC

Standard test method for determination of individual compounds in spark ignition engine fuels by 100 meter capillary high resolution gas chromatography

This test method provides procedures for the determination of individual hydrocarbon components of spark-ignition engine fuels and their mixtures containing oxygenate blends (MTBE, ETBE, ethanol, and so forth) with boiling ranges up to 225 ºC.

S-4476

D 6729 Calibration Standard Mixtures

Reference sample ARC96OX from Alberta Research Council, Edmonton, Canada
Spark ignition engine fuel standard of known composition and concentration by mass.

Individual and mixed components reference materials

See the compounds section for individual compounds and the petroleum section for mixed components.
Custom mixes are available on order. Please inquire for a quote.

ASTM D 6730-01(2006)e1
Hydrocarbon compounds in spark ignition engine fuels by GC

Standard test method for determination of individual components in spark ignition engine fuels by 100-metre capillary (with precolumn) high resolution gas chromatography

This test method provides procedures for the determination of individual hydrocarbon components of spark-ignition engine fuels and their mixtures containing oxygenate blends (MTBE, ETBE, ethanol, and so forth) with boiling ranges up to 225 ºC.

S-4477

D6730 Calibration Standard Mixtures
Reference sample ARC96OX available from Alberta Research Council, Edmonton, Canada
Spark ignition engine fuel standard of known composition and concentration by mass.

Individual and mixed components reference materials
See the compounds section for individual compounds and the petroleum section for mixed components.
Custom mixes are available on order. Please inquire for a quote.

ASTM D 6751-07a
Biodiesel fuel blend stock for distillate fuels

Standard specification for biodiesel fuel blend stock (B100) for middle distillate fuels

This specification covers biodiesel (B100) Grades S15 and S500 for use as a blend component with middle distillate fuels.

D 6751 Requirements

Property	Method	Limits	Units
Flash Point	D 93	130.0 min	ºC
Water and sediment	D 2709	0.050 max	% volume
Kinematic viscosity	D 445	1.9-6.0	mm^2/s
Sulfated ash	D 874	0.020 max	% mass
Sulfur	D 5453	0.05 max	% mass
Copper strip corrosion	D 130	No. 3 max	
Cetane number	D 613	47 min	
Cloud point	D 2500	Report	ºC
Carbon residue	D 4530	0.050 max	% mass
Acid number	D 664	0.80 max	mg KOH/g
Free glycerine	D 6584	0.020	% mass
Total glycerine	D 6584	0.240	% mass
Phosphorous content	D 4951	0.001 max	% mass
Distillation temperature	D 1160	340 max	ºC
Atmospheric equivalent temperature, 90 % recovered			

New ASTM standards in development

ASTM D 5504-01 (2006)

Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence

ASTM D 6228-98 (2203)

Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Ionization Detection

ASTM D 6920-03

Standard Test Method for Total Sulfur in Naphthas, Distillates, Reformulated Gasolines, Diesels, Biodiesels, and Motor Fuels by Oxidative Combustion and Electrochemical Detection

ASTM D 6968-03

Standard Test Method for Simultaneous Measurement of Sulfur Compounds and Minor Hydrocarbons in Natural Gas and Gaseous Fuels by Gas Chromatography and Atomic Emission Detection.

ASTM D 7165-06

Standard Practice for Gas Chromatograph Based On-line/At-line Analysis for Sulfur Content of Gaseous Fuels

ASTM D-7166-05

Standard Practice for Total Sulfur Analyzer Based On-line/At-line for Sulfur Content of Gaseous Fuels.

UOP 741-86 (ASTM method)

Paraffin and naphthene distribution by carbon number of saturated petroleum distillates by GC

This method is for determining the distribution of paraffins and naphthenes by carbon number, in hydrocarbon samples having an end-point of 200ºC or less (C3-C11). C12 at concentrations less than 3% can be determined. Olefins and aromatics interfere and must be removed prior to analysis by ASTM method D 2002, D 2003 or suitable techniques.

S-4478-SET

UOP 741 High Naphthene sample

1.5mL neat in Certan® bottle.

Components	PNA High Naphthenes S-4479-1.5ML	PNA Low Naphthenes S-4480-1.5ML	Aromatics in PNA S-4481-1.5ML
C5 Naphthenes Cyclopentane,	1	1	1
C5 Paraffins n-Pentane	1	4	1
C6 Naphthenes Cyclohexane	8	4	4
C6 Paraffins n-Hexane	8	18	6
C7 Naphthenes Methylcyclohexane	11	4	8
C7 Paraffins n-Heptane	11	20	15
C8 Naphthenes Ethylcyclohexane	9	4	6
C8 Paraffins n-Octane	9	20	15
C9 Naphthenes Isopropylcyclohexane	8	2	6
C9 Paraffins n-Nonane	8	12	10
C10 Naphthenes n-Butylcyclohexane	7	2	4
C10 Paraffins n-Decane	7	7	8
C11 Naphthenes n-Pentylcyclohexane	4	0.5	1
C11 Paraffins n-Undecane	4	1	2
C12 Naphthenes n-Hexylcyclohexane	2	0	1
C12 Paraffins n-Dodecane	2	0.5	1
Aromatics			
Benzene	0	0	1
Toluene	0	0	5
Xylenes	0	0	2
Ethyl benzene	0	0	3

EPA methods

EPA 425.1
Surfactants (LAS) by colorimetry

Methylene blue active substances

Available standards:

2561.18-K-ME **LAS 12-Na**
Sodium n-dodecylbenzenesulfonate, 99% pure
1000µg/mL in methanol

3724.18-K-MX **LAS 10-14 Na (tech.)** [69669-44-9]
Sodium dodecylbenzenesulfonate, tech. C10-C14
1000µg/mL in methanol, acetonitrile or water

This method can not differentiate between LAS, ABS and LAS with benzenesulfonates at the end or in the alkyl chain.

EPA 505
Water - organohalide pesticides and PCBs by GC

Analysis of organohalide pesticides and commercial polychlorinated biphenyls (PCB) products in water by microextraction and gas chromatography

This method is applicable to the determination of the analytes in finished drinking water, drinking water during intermediate stages of treatment, and the raw source water. The method provide qualitative confirmation of results by Gas Chromatography/Mass Spectrometry.

For individual standards see the PCB and pesticide sections in the Compounds section, pages 354 and 367.

EPA 506 Rev 1.1
Drinking water - phthalates and adipates by GC

Determination of phthalate and adipate esters in drinking water by liquid-liquid or liquid-solid extraction by gas chromatography with a photoionization detector

After capillary column GC separation, a photoionization detector is required for detection and MDLs are limited to approximately 10µg/L. Phthalates and adipates are among the most common contaminants encountered in the laboratory and extreme care must be taken to ensure clean reagent blanks.

S-4231-K-IO
S-4231-K-5IO

EPA 506 Phathalates and Adipates in Drinking Water
7 Analytes, each 1000µg/mL in isooctane; units: 5x1mL or 5mL screw cap bottle

1225.12	Diethyl phthalate	DEP	[84-66-2]
1228.22	Bis(2-ethylhexyl) adipate	BEHA	[103-23-1]
1223.24	Di-n-octyl phthalate	DNOP	[117-84-0]
1227.17	Benzyl butyl phthalate	BBP	[85-68-7]
1224.24	Bis(2-ethylhexyl) phthalate	BEHP	[117-81-7]
2094.10	Dimethyl phthalate	BMP	[131-11-3]
1226.16	Di-n-butyl phthalate	DBP	[84-74-2]

S-4232-ASS-ME
S-4232-ASS-5ME

EPA 506 Laboratory Performance Test
7 Analytes, each concentration as listed in methanol; units: 5x1mL, 1x5mL

1225.12	Diethyl phthalate	DEP	[84-66-2]	100µL/mL
1228.22	Bis(2-ethylhexyl) adipate	BEHA	[103-23-1]	1200µL/mL
1223.24	Di-n-octyl phthalate	DNOP	[117-84-0]	650µL/mL
1227.17	Benzyl butyl phthalate	BBP	[85-68-7]	250µL/mL
1224.24	Bis(2-ethylhexyl) phthalate	BEHP	[117-81-7]	250µL/mL
2094.10	Dimethyl phthalate	BMP	[131-11-3]	100µL/mL
1226.16	Di-n-butyl phthalate	DBP	[84-74-2]	100µL/mL

EPA 525.2
Water - organics and PAHs by GC-MS

Determination of organic compounds in drinking water by liquid-solid extraction and capillary column gas chromatography-mass spectrometry.

This test method provides procedures for determination of organic compounds in finished drinking water, source water, or drinking water in any treatment stage. The method is applicable to a wide range of organic compounds that are efficiently portioned from the water sample onto a C18 organic phase chemically bonded to a solid matrix in a disk or cartridge, and sufficiently volatile and thermally stable for gas chromatography.

S-4116-100-AC
S-4116-100-5AC

EPA 525.2 PAH mixture, 13 Compounds in Acetone
13 Analytes, each 100µg/mL in acetone; units: 1x1mL, 1x5mL

0002.12	Acenaphthylene	[208-96-8]
1049.14	Anthracene	[120-12-7]
0201.18	Benz[a]anthracene	[56-55-3]
0263.20	Benzo[b]fluoranthene	[205-99-2]
0265.20	Benzo[k]fluoranthene	[207-08-9]
0222.22	Benzo[ghi]perylene	[191-24-2]
0239.20	Benzo[a]pyrene	[50-32-8]
0212.18	Chrysene	[218-01-9]
0203.22	Dibenz[a,h]anthracene	[53-70-3]
0217.13	Fluorene	[86-73-7]
0277.22	Indeno[1,2,3-cd]pyrene	[193-39-5]
0816.14	Phenanthrene	[85-01-8]
0235.16	Pyrene	[129-00-0]

For individual pesticides see the Compounds section, pages 367-372.

EPA 527.1
Drinking water - pesticides and PBDEs by GC-MS

Determination of selected pesticides and flame retartdants in drinking water by solid phase extraction and capillary column gas chromatography / mass spectrometry (GC-MS)

The Method 527 was developed for the determination of selected semivolatile organic compounds in drinking water.

PBDE Congeners of Primary interest (8 compounds, two concentrations; unit: 1x1ml) (§7.8)

EPA 527 – Multiple Component Solutions

S-4482-500-ME

EPA 527 Mix 1, Pesticides A

10 Analytes, each 500µg/mL in Methanol; unit: 1x1mL

2768.8	Atrazine	[1912-24-9]
3324.9	Bromacil	[314-40-9]
3100.19	Esbiol (S-bioalletrin)	[28434-00-6]
3394.25	Esfenvalerate	[66230-04-4]
3405.25	Fenvalerate	[51630-58-1]
3420.12	Hexazinone	[51235-04-2]
3468.10	Kepone	[143-50-0]
3727.12	Norfluazon	[27314-13-2]
3335.10	Oxychlordane	[27304-13-8]
3491.10	Prometryne	[7287-19-6]
2769.9	Propazine	[139-40-2]

S-4483-500-ME

EPA 527 Mix 2, Pesticides B

9 Analytes, each 500µg/mL in Methanol; unit: 1x1mL

3323.23	Bifenthrin	[82657-04-3]
3344.9	Chlorpyrifos (Dursban)	[2921-88-2]
3381.5	Dimethoate	[60-51-5]
1396.10	Malathion	[121-75-5]
3457.10	Mirex	[2385-85-5]
3463.12	Nitrofen	[1836-75-5]
3469.10	Parathion-ethyl	[56-38-2]
3228.9	Terbufos-sulfone	[56070-16-7]
3317.12	Thiobencarb	[28249-77-6]
3524.12	Vinclozolin	[50471-44-8]

S-4484-50-IO

EPA 527 Mix 3, DBE congeners and hexabromobiphenyl

5 Analytes, each 50µg/mL in Isooctane:Ethyl acetate (8:2); unit: 1x1mL

3108.12	2,2',4,4',5,5'-Hexabromobiphenyl	PBB-153	[59080-40-9]
1962.12	2,2',4,4'-Tetrabromodiphenyl ether	BDE-47	[5436-43-1]
1967.12	2,2',4,4',5-Pentabromodiphenyl ether	BDE-99	[60348-60-9]
1968.12	2,2',4,4',6-Pentabromodiphenyl ether	BDE-100	[189084-64-8]
1971.12	2,2',4,4',5,5'-Hexabromodiphenyl ether	BDE-153	[68631-49-2]

S-4485-500-AC

EPA 527, Internal standard

3 Analytes, each 500µg/mL in Acetone; unit: 1x1mL

1524.12	Acenaphthene-d10	[15067-26-2]
0389.14	Phenanthrene-d10	[1517-22-2]
1024.18	Chrysene-d12	[19-03-5]

S-4486-500-AC

EPA 527, Surrogate standard

3 Analytes, each 500µg/mL in Acetone; unit: 1x1mL

3478,8	1,3-Dimethyl-2-nitrobenzene	[81-20-9]
2138.18	Triphenylphosphate	[115-86-6]
1534.20	Perylene-d12	[1520-96-3]

EPA 528.1.0
Phenols in drinking water by GC-MS

Determination of phenols in drinking water by solid phase extraction and capillary column gas chromatography-mass spectrometry.

This method provides procedures for the determination of phenols in finished drinking water. This method can also be used on untreated course water and other types of water samples. A large variety of phenols can be determined by this method.

EPA 528 rev.1.0 Standard Stock Solutions

12 Single stock solutions, each analyte 5µg/mL in methanol; unit: 1x5mL of each solution

1427.6-5-5ME	Phenol	[108-95-2]
2062.6-5-5ME	2-Chlorophenol	[95-57-8]
1403.7-5-5ME	2-Methylphenol (o-Cresol)	[95-48-7]
2085.6-5-5ME	2-Nitrophenol	[88-75-5]
1406.8-5-5ME	2,4-Dimethylphenol	[105-67-9]
2064.6-5-5ME	2,4-Dichlorophenol	[120-83-2]
2071.7-5-5ME	4-Chloro-3-methylphenol	[59-50-7]
2076.6-5-5ME	2,4,6-Trichlorophenol	[88-06-2]
2079.6-5-5ME	2,4-Dinitrophenol	[51-28-5]
2087.6-5-5ME	4-Nitrophenol	[100-02-7]
2083.7-5-5ME	2-Methyl-4,6-dinitrophenol	[534-52-1]
2084.6-5-5ME	Pentachlorophenol	[87-86-5]

2445.12-KIT Set of 12 stock solutions, 12x5 mL

S-4365-30-5ME

EPA 528 rev. 1.0 Primary Dilution Standard Solution

12 Analytes, each 30ng/mL in methanol; unit: 1x5mL

1427.6	Phenol	[108-95-2]
2062.6	2-Chlorophenol	[95-57-8]
1403.7	2-Methylphenol (o-Cresol)	[95-48-7]
2085.6	2-Nitrophenol	[88-75-5]
1406.8	2,4-Dimethylphenol	[105-67-9]
2064.6	2,4-Dichlorophenol	[120-83-2]
2071.7	4-Chloro-3-methylphenol	[59-50-7]
2076.6	2,4,6-Trichlorophenol	[88-06-2]
2079.6	2,4-Dinitrophenol	[51-28-5]
2087.6	4-Nitrophenol	[100-02-7]
2083.6	2-Methyl-4,6-dinitrophenol	[534-52-1]
2084.6	Pentachlorophenol	[87-86-5]

S-4366-SET-5DC

EPA 528 rev.1.0 Calibration Solutions

11 Analytes, 2 Internal Standards and 3 Surrogate Analytes in dichloromethane; unit: 7x5mL

	Analyte		CAL 1	CAL 2	CAL 3	CAL 4	CAL 5	CAL 6	CAL 7
			ng/µL	ng/µL	ng/µL	ng/µL	ng/µL	ng/µL	ng/µL
1427.6	Phenol	[108-95-2]	15.00	10.00	5.00	2.00	1.00	0.50	0.10
2062.6	2-Chlorophenol	[95-57-8]	15.00	10.00	5.00	2.00	1.00	0.50	0.10
1403.7	2-Methylphenol (o-cresol)	[95-48-7]	15.00	10.00	5.00	2.00	1.00	0.50	0.10
2085.6	2-Nitrophenol	[88-75-5]	15.00	10.00	5.00	2.00	1.00	0.50	0.10
1406.8	2,4-Dimethylphenol	[105-67-9]	15.00	10.00	5.00	2.00	1.00	0.50	0.10
2071.7	4-Chloro-3-methylphenol	[59-50-7]	15.00	10.00	5.00	2.00	1.00	0.50	0.10
2076.6	2,4,6-Trichlorophenol	[88-06-2]	15.00	10.00	5.00	2.00	1.00	0.50	0.10
2079.6	2,4-Dinitrophenol	[51-28-5]	15.00	10.00	5.00	2.00	1.00	0.50	0.10
2087.6	4-Nitrophenol	[100-02-7]	15.00	10.00	5.00	2.00	1.00	0.50	0.10
2083.6	2-Methyl-4,6-dinitrophenol	[534-52-1]	15.00	10.00	5.00	2.00	1.00	0.50	0.10
2084.6	Pentachlorophenol	[87-86-5]	15.00	10.00	5.00	2.00	1.00	0.50	0.10
	Internal Standards								
3841.8	1,2-Dimethyl-3-nitrobenzene	[83-41-0]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
2081.6	2,3,4,5-Tetrachlorophenol	[4901-51-3]	5.00	5.00	5.00	5.00	5.00	5.00	5.00
	Surrogate Analytes								
2420.6	2-Chlorophenol-3,4,5,6-d4	[93951-73-6]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
2396.8	2,4-Dimethylphenol-3,5,6-d3	[93951-75-8]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
2060.6	2,4,6-Tribromophenol	[118-79-6]	5.00	5.00	5.00	5.00	5.00	5.00	5.00

S-4367-100-5DC

EPA 528 rev. 1.0 Internal Standard Solution 1

100µg/mL in dichloromethane; unit: 1x5mL

3841.8	1,2-Dimethyl-3-nitrobenzene	[83-41-0]

S-4368-200-5DC

EPA 528 rev. 1.0 Internal Standard Solution 2

200µg/mL in dichloromethane; unit: 1x5mL

2081.6	2,3,4,5-Tetrachlorophenol	[4901-51-3]

S-4369-ASS-5DC

EPA 528 rev. 1.0 Internal Standard Solution 3

2 Analytes, each concentration as listed in dichloromethane; unit: 1x5mL

3841.8	1,2-Dimethyl-3-nitrobenzene	[83-41-0]	100µg/mL
2081.6	2,3,4,5-Tetrachlorophenol	[4901-51-3]	200µg/mL

S-4370-100-5ME

EPA 528 rev. 1.0 Sample Fortification Solution 1

100µg/mL in methanol; unit: 1x5mL

2420.6	2-Chlorophenol-3,4,5,6-d4	[93951-73-6]

S-4371-100-5AC

EPA 528 rev. 1.0 Sample Fortification Solution 2

100µg/mL in acetone; unit: 1x5mL

2396.8	2,4-Dimethylphenol-3,5,6-d3	[93951-75-8]

S-4372-200-5ME

EPA 528 rev. 1.0 Sample Fortification Solution 3

200µg/mL in methanol; unit: 1x5mL

2060.6	2,4,6-Tribromophenol	[118-79-6]

EPA 604
Phenols in wastewater by GC-ECD or GC-FID

Methods for organic chemical analysis of municipal and industrial wastewater – Phenols

This test method describes the procedure for the determination of phenols and phenols derivatives. Underivatized phenols may be analysed by GC-FID. Target phenols may also be derivatized with diazomethane or pentafluorobenzylbromide (PFBBr) and analysed by GC-FID or GC-ECD.

S-4247-ASS-ME

EPA 604 Calibration Mixture

11 Analytes, each 500µg/mL in methanol; unit: 1x1mL
(2,4-Dinitrophenol and 4,6-dinitrocresol at concentration 1000µg/mL)

2071.7	4-Chloro-3-methylphenol	[59-50-7]
2062.6	2-Chlorophenol	[95-57-8]
2064.6	2,4-Dichlorophenol	[120-83-2]
1406.8	2,4-Dimethylphenol	[105-67-9]
2079.6	2,4-Dinitrophenol	[51-28-5]
2083.7	2-Methyl-4,6-dinitrophenol	[534-52-1]
2085.6	2-Nitrophenol	[88-75-5]
2087.6	4-Nitrophenol	[100-02-7]
2084.6	Pentachlorophenol	[87-86-5]
1427.6	Phenol	[108-95-2]
2076.6	2,4,6-Trichlorophenol	[88-06-2]

2060.6-200-ME

EPA 604, Surrogate Standard
200 µg/mL in methanol; unit: 1x1mL

2060.6	2,4,6-Tribromophenol	[118-79-6]

S-4148-200-ME

EPA 604 Calibration Mixture as PFB derivatives
11 Analytes, each 200µg/mL in methanol; unit: 1x1mL

2071.7	4-Chloro-3-methylphenol	[59-50-7]
2062.6	2-Chlorophenol	[95-57-8]
2064.6	2,4-Dichlorophenol	[120-83-2]
1406.8	2,4-Dimethylphenol	[105-67-9]
2079.6	2,4-Dinitrophenol	[51-28-5]
2083.7	2-Methyl-4,6-dinitrophenol	[534-52-1]
2085.6	2-Nitrophenol	[88-75-5]
2087.6	4-Nitrophenol	[100-02-7]
2084.6	Pentachlorophenol	[87-86-5]
1427.6	Phenol	[108-95-2]
2076.6	2,4,6-Trichlorophenol	[88-06-2]

2091.13-200-ME

EPA 604, Surrogate Standard as PFB derivatives
200 µg/mL in methanol; unit: 1x1mL

2091.13	2,4,6-Tribromophenol-PFB

EPA 606
Phthalate esters in wastewater by GC

Methods for organic chemical analysis of municipal and industrial wastewater – Phthalate esters

Standard test method for the determination of phthalate esters in municipal and industrial wastewater by gas chromatography with electron capture detector.

S-4233-2K-HX
S-4233-2K-5HX

EPA 606 Phthalate Esters in Waste Water by GC-ECD
6 Analytes, each 2000µg/mL in hexane; units: 5x1mL, 1x5mL

1224.4	Bis(2-ethylhexyl) phthalate	[117-81-7]
1227.19	Benzyl butyl phthalate	[85-68-7]
1226.16	Di-n-butyl phthalate	[84-74-2]
1225.12	Diethyl phthalate	[84-66-2]
2094.10	Dimethyl phthalate	[131-11-3]
1223.24	Di-n-octyl phthalate	[117-84-0]

S-4234-ASS-AC
S-4234-ASS-5AC

EPA 606 Control Sample Mixture
6 Analytes, each concentration as listed in acetone; units: 5x1mL, 1x5mL

1224.4	Bis(2-ethylhexyl) phthalate	[117-81-7]	500µL/mL
1227.19	Benzyl butyl phthalate	[85-68-7]	100µL/mL
1226.16	Di-n-butyl phthalate	[84-74-2]	250µL/mL
1225.12	Diethyl phthalate	[84-66-2]	250µL/mL
2094.10	Dimethyl phthalate	[131-11-3]	250µL/mL
1223.24	Di-n-octyl phthalate	[117-84-0]	500µL/mL

EPA 608/625
Organochlorine pesticides and PCBs by GC and GC-MS in municipal discharges

These methods covers the determination of certain organochlorine pesticides and PCBs in municipal and industrial discharges.

For individual pesticides and PCBs, see the Compound section, pages 367 and 354.

EPA 610
PAH in wastewater by HPLC and GC

Methods for organic chemical analysis of municipal and industrial wastewater – PAHs

Standard test method for the determination of certain polycyclic aromatic hydrocarbons (PAH) in municipal and industrial wastewater by both high performance liquid chromatography and gas chromatography.

S-4114-ASS-5AN

16 Priority PAH, Control Mix
16 Analytes, each concentration as listed in acetonitrile; unit: 1x5mL screw cap bottle

0732.12	Acenaphthene	[83-32-9]	100 µg/mL
0002.12	Acenaphthylene	[208-96-8]	100 µg/mL
1049.14	Anthracene	[120-12-7]	100 µg/mL
0201.18	Benz[a]anthracene	[56-55-3]	10 µg/mL
0263.20	Benzo[b]fluoranthene	[205-99-2]	100 µg/mL
0265.20	Benzo[k]fluoranthene	[207-08-9]	5 µg/mL
0222.22	Benzo[ghi]perylene	[191-24-2]	10 µg/mL
0239.20	Benzo[a]pyrene	[50-32-8]	10 µg/mL
0212.18	Chrysene	[218-01-9]	10 µg/mL
0203.22	Dibenz[a,h]anthracene	[53-70-3]	10 µg/mL
0260.16	Fluoranthene	[206-44-0]	10 µg/mL
0217.13	Fluorene	[86-73-7]	10 µg/mL
0277.22	Indeno[1,2,3-cd]pyrene	[193-39-5]	10 µg/mL
0711.10	Naphthalene	[91-20-3]	100 µg/mL
0816.14	Phenanthrene	[85-01-8]	100 µg/mL
0235.16	Pyrene	[129-00-0]	10 µg/mL

S-4115-ASS-AN

Check Mix, EPA 610

8 Analytes, each concentration as listed in acetonitrile; units: 1x1mL, 5x1mL

0711.10	Naphthalene	[91-20-3]	100 µg/mL
0002.12	Acenaphthylene	[208-96-8]	100 µg/mL
0732.12	Acenaphthene	[83-32-9]	100 µg/mL
0217.13	Fluorene	[86-73-7]	100 µg/mL
0816.14	Phenanthrene	[85-01-8]	100 µg/mL
1049.14	Anthracene	[120-12-7]	100 µg/mL
0265.20	Benzo(k)fluoranthene	[207-08-9]	5 µg/mL
0212.18	Chrysene	[218-01-9]	10 µg/mL

EPA 1614
PBDEs by HRGC/HRMS

NEW

Brominated diphenyl ethers in water, soil, sediment, and tissue by HRGC/HRMS

The Method 1614 was developed for determination of the polybrominated diphenyl ether congeners commonly found in environmental samples and resulting from use of brominated flame retardants, by isotope dilution and internal standard high resolution gas chromatography/high resolution mass spectrometry (HRGC/HRMS). The method is applicable to aqueous, solid, tissue, and multi-phase matrices.

S-4390-20-IO
S-4390-1-IO

EPA 1614 – Multiple Component Solution

PBDE Congeners of Primary interest (7 compounds, two concentrations; unit: 1x1mL) (§7.8)

Chiron No.	Compound	Abbr.	CAS No.	S-4390-20-IO µg/mL	S-4390-1-IO µg/mL
1961.12	2,4,4'-Tribromodiphenyl ether	PBDE-28	[41318-75-6]	20	1
1962.12	2,2',4,4'-Tetrabromodiphenyl ether	PBDE-47	[5436-43-1]	20	1
1967.12	2,2',4,4',5-Pentabromodiphenyl ether	PBDE-99	[60348-60-9]	20	1
1968.12	2,2',4,4',6-Pentabromodiphenyl ether	PBDE-100	[189084-64-8]	20	1
1971.12	2,2',4,4',5,5'-Hexabromodiphenyl ether	PBDE-153	[68631-49-2]	20	1
1973.12	2,2',3,4,4',5',6'-Heptabromodiphenyl ether	PBDE-183	[207122-16-5]	20	1
1811.12	Decabromodiphenyl ether	PBDE-209	[1163-19-5]	200	10

Internal standards F-PBDEs®

In isooctane or toluene; unit: 1x1mL

For a complete list, see the Compound section, pages 358-359.

2258.12-50-IO	3'-Fluoro-2,4-dibromodiphenyl ether	F-PBDE-7		50µg/mL
2257.12-50-IO	3'-Fluoro-3,4-dibromodiphenyl ether	F-PBDE-12		50µg/mL
1927.12-50-IO	4'-Fluoro-2,3',6-tribromodiphenyl ether	F-PBDE-27	[863314-86-7]	50µg/mL
2160.12-50-T	2'-Fluoro-2,4,4'-Tribromodiphenyl ether	F-PBDE-28	[876310-22-4]	50µg/mL
2161.12-50-T	6-Fluoro-2,2',4,4'-tetrabromodiphenyl ether	F-PBDE-47	[876310-23-4]	50µg/mL
2506.12-50-IO	5,5'-Difluoro-2,2',4,4'-tetrabromodiphenyl ether	2F-PBDE-47	[886748-32-9]	50µg/mL
2162.12-50-IO	6-Fluoro-2,3',4,4'-tetrabromodiphenyl ether	F-PBDE-66		50µg/mL
2503.12-50-IO	5,6-Difluoro-2,2',3,4,4'-pentabromodiphenyl ether	2F-PBDE-85		50µg/mL
2505.12-50-IO	3,6-Difluoro-2,2',4,4'5-pentabromodiphenyl ether	2F-PBDE-99	[886748-34-1]	50µg/mL
2163.12-50-T	3-Fluoro-2,2',4,4',6-pentabromodiphenyl ether	F-PBDE-100	[887401-80-1	50µg/mL
2504.12-50-IO	3,5-Difluoro-2,3',4,4',6-pentabromodiphenyl ether	2F-PBDE-119	[886748-35-2]	50µg/mL
1929.12-50-T	4'-Fluoro-2,3,3',4,5,6-hexabromodiphenyl ether	F-PBDE-160	[863314-88-9]	50µg/mL
2167.12-50-T	4',6-Difluorooctabromodiphenyl ether	2F-PBDE-201	[863314-96-9]	50µg/mL
2168.12-50-IO	4'-Fluoro-2,2',3,3',4',5,5'6,6'-nonabromodiphenyl ether	F-PBDE-208	[876310-29-1]	50µg/mL

Labelled Internal Standard Multiple Congeners are made by request based upon choice and requirement, e.g.:

Name		Congener		CS-1	CS-2	CS-3	CS-4	CS-5
Natives				ng/mL	ng/mL	ng/mL	ng/mL	ng/mL
1961.12	2,4,4'-TrBDE	PBDE-28	[41318-75-6]	1.0	5.0	50	500	2500
1962.12	2,2',4,4'-TeBDE	PBDE-47	[5436-43-1]	1.0	5.0	50	500	2500
1967.12	2,2',4,4',5-PeBDE	PBDE-99	[60348-60-9]	1.0	5.0	50	500	2500
1968.12	2,2',4,4',6-PeBDE	PBDE-100	[189084-64-8]	1.0	5.0	50	500	2500
1971.12	2,2',4,4',5,5'-HeBDE	PBDE-153	[68631-49-2]	1.0	5.0	50	500	2500
1973.12	2,2'3,4,4',5',6-HpBDE	PBDE-183	[207122-16-5]	1.0	5.0	50	500	2500
1811.12	DeBDE	PBDE-209	[1163-19-5]	10	50	500	5000	25000
Labelled								
2160.12	2'-Fluoro-2,4,4'-TrBDE	F-PBDE-28	[876310-22-4]	100	100	100	100	100
2161.12	6-Fluoro-2,2',4,4'-TeBDE	F-PBDE-47		100	100	100	100	100
2506.12	5,5'-Difluoro-2,2',4,4'-TeBDE	FF-PBDE-47	[886748-32-9]	100	100	100	100	100
2162.12	6-Fluoro-2,3',4,4'-TeBDE	F-PBDE-66		100	100	100	100	100
2503.12	5,6-Difluoro-2,2',3,4,4'-PeBDE	F-PBDE-85		100	100	100	100	100
2505.12	3,6-Difluoro-2,2',4,4'5-PeBDE	FF-PBDE-99	[886748-34-1]	100	100	100	100	100
2163.12	3-Fluoro-2,2'4,4',6-PeBDE	F-PBDE-100	[887401-80-1]	100	100	100	100	100
1929.12	4'-Fluoro-2,3,3',4,5,6-HxBDE	F-PBDE-160		100	100	100	100	100
2167.12	4',6-Difluoro-OcBDE	FF-PBDE-201	[863314-96-9]	100	100	100	100	100
2168.12	4'-Fluoro-2,2',3,3',4',5,5'6,6'-NoBDE	F-PBDE-208	[876310-29-1]	1000	1000	1000	1000	1000
Labelled clean-up								
2164.12	3,5-Difluoro-2,3',4,4',6-PeBDE	F-PBDE-119	[876310-26-8]	100	100	100	100	100
Labelled Injection Internal								
2525.12	3'-Fluoro-2,4,6-TrCB	F-PCB-30m		100	100	100	100	100
2344.12	3'-Fluoro-3,4,4',5-TeCB	F-PCB-81		100	100	100	100	100

EPA 1653
Chlorinated phenols in pulp and papir industries wastewater

Chlorinated phenolics wastewater by in situ acetylation and GC-MS

S-4243-100-ME

EPA 1653 Chlorophenols

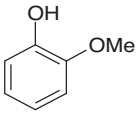
7 Analytes, each 100μg/mL in methanol; units: 1x1mL, 5x1mL

2068.6	4-Chlorophenol	[106-48-9]
2064.6	2,4-Dichlorophenol	[120-83-2]
2069.6	2,6-Dichlorophenol	[87-65-0]
2075.6	2,4,5-Trichlorophenol	[95-95-4]
2076.6	2,4,6-Trichlorophenol	[88-06-2]
2149.6	2,3,4,6-Tetrachlorophenol	[58-90-2]
2084.6	Pentachlorophenol	[87-86-5]

S-4244-100-ME

EPA 1653 Chloroguaiacols

8 Analytes, each 100µg/mL in methanol; unit: 1x1mL



Guaiacol

4-Chloroguaiacol	[16766-30-6]
3,4-Dichloroguaiacol	
4,5-Dichloroguaiacol	
4,6-Dichloroguaiacol	
3,4,5-Trichloroguaiacol	
3,4,6-Trichloroguaiacol	
4,5,6-Trichloroguaiacol	
Tetrachloroguaiacol	

S-4245-100-ME

EPA 1653 Chlorocathecols

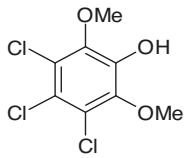
7 Analytes, each 100µg/mL in methanol; unit: 1x1mL

4-Chlorocatechol	[2138-22-9]
3,4-Dichlorocatechol	
3,6-Dichlorocatechol	
4,5-Dichlorocatechol	[3428-24-8]
3,4,5-Trichlorocatechol	
3,4,6-Trichlorocatechol	
Tetrachlorocatechol	[1198-55-6]

S-4246-100-AC

EPA 1653 Chlorovanillines and syringealdehydes

6 Analytes, each 100µg/mL in acetone; unit: 1x1mL



Trichlorosyringol

5-Chlorovanillin	[19463-48-0]
6-Chlorovanillin	
5,6-Dichlorovanillin	
2-Chlorosyringaldehyde	
Trichlorosyringol	
2,6-Dichlorosyringaldehyde	

EPA 1668
PCBs by HRGC/HRMS

Revision A: Chlorinated biphenyl congeners in water, soil, sediment, and tissue by HRGC/HRMS

Method 1668 was developed by the U.S. EPA for congener-specific determination of the polychlorinated biphenyl (PCB) congeners designated by WHO. The toxic PCBs and the beginning and ending level-of-chlorination CBs are determined by isoptope dilution high resolution gas chromatography/high resolution mass spectrometry (HRGC/HRMS). The remaining PCBs are determined by internal standard HRGC/HRMS. Method 1668A is applicable to aqueous, solid, tissue, and multiphase matrices.

EPA 8041 A
Phenols and derivatives by GC-ECD or FID

Phenols by gas chromatography

Standard Test method for analysis of phenols in solid waste and ground water using GC procedures and derivatization. Underivatized phenols may be analysed by GC-FID. Target phenols may also be derivatized with diazomethane or pentafluorobenzylbromide (PFBBr) and analysed by GC-FID or GC-ECD.

Other compositions are available, please inquire.
CHIRON can also offer the PFB derivatives.

S-4207-K-IP

EPA 8041A RCRA Target Phenols Solution

21 Analytes, each1000μg/mL in isopropanol; unit: 1x1mL

2071.7	4-Chloro-3-methylphenol	[59-50-7]
2062.6	2-Chlorophenol	[95-57-8]
1403.7	2-Methylphenol	[95-48-7]
1404.7	3-Methylphenol	[108-39-4]
1358.7	4-Methylphenol	[106-44-5]
2133.12	2-Cyclohexyl-4,6-dinitrophenol	[131-89-5]
2064.6	2,4-Dichlorophenol	[120-83-2]
2069.6	2,6-Dichlorophenol	[87-65-0]
1406.8	2,4-Dimethylphenol	[105-67-9]
2079.6	2,4-Dinitrophenol	[51-28-5]
2144.10	Dinoseb	[88-85-7]
2083.7	2-Methyl-4,6-dinitrophenol	[534-52-1]
2085.6	2-Nitrophenol	[88-75-5]
2087.6	4-Nitrophenol	[100-02-7]
2084.6	Pentachlorophenol	[87-86-5]
1427.6	Phenol	[108-95-2]
2081.6	2,3,4,5-Tetrachlorophenol	[4901-51-3]
2149.6	2,3,4,6-Tetrachlorophenol	[58-90-2]
2074.6	2,3,5,6-Tetrachlorophenol	[935-95-5]
2075.6	2,4,5-Trichlorophenol	[95-95-4]
2076.6	2,4,6-Trichlorophenol	[88-06-2]

S-4208-K-IP

EPA 8041A Non-RCRA Target Phenol Standards

17 Analytes, each 1000µg/mL in isopropanol; unit: 1x1mL

2063.7	2-Chloro-5-methylphenol	[615-74-7]
2070.7	4-Chloro-2-methylphenol	[1570-64-5]
2067.6	3-Chlorophenol	[108-43-0]
2068.6	4-Chlorophenol	[106-48-9]
2066.6	2,3-Dichlorophenol	[576-24-9]
2065.6	2,5-Dichlorophenol	[583-78-8]
2080.6	3,4-Dichlorophenol	[95-77-2]
2078.6	3,5-Dichlorophenol	[591-35-5]
1405.8	2,3-Dimethylphenol	[526-75-0]
1407.8	2,5-Dimethylphenol	[95-87-4]
1365.8	2,6-Dimethylphenol	[576-26-1]
1409.8	3,4-Dimethylphenol	[95-65-8]
2462.6	2,5-Dinitrophenol	[329-71-5]
2086.6	3-Nitrophenol	[554-84-7]
2077.6	2,3,4-Trichlorophenol	[15950-66-0]
2073.6	2,3,5-Trichlorophenol	[933-78-8]
2072.6	2,3,6-Trichlorophenol	[933-75-5]

S-4209-K-IP
S-4209-K-5IP

EPA 8041A Internal Standard

2 Analytes, each 1000µg/mL in isopropanol; unts: 1x1mL, 5x1mL, 1x5mL

2470.6	2,5-Dibromophenol	[28165-52-8]
3103.12	2,2',5,5'-Tetrabromobiphenyl	[59080-37-4]

2061.6-K-IO
2061.6-K-5IO

EPA 8041A Surrogate Standard

1000µg/mL in isopropanol; unts: 1x1mL, 5x1mL, 1x5mL

2061.6	2,4-Dibromophenol	[615-58-7]

2092.13-K-IO
2092.13-K-5IO

EPA 8041A Surrogate Standards PFB-derivatives

1000µg/mL in isopropanol; unts: 1x1mL, 5x1mL, 1x5mL

2092.13	2,4-Dibromophenol-PFB	

EPA 8061 A
Phthalates by GC-ECD

Phthalate esters by gas chromatography with electron capture detection (GC-ECD).

This test method is used to determine the identities and concentration of various phthalate esters in aqueous and solid matrices, including groundwater, leachate, soil, sludge and sediment.

S-4235-K-IO
S-4235-K-5IO

Phthalate Esters in Sludge Matrixes by GC-ECD
16 Analytes, each 1000µg/mL in isooctane; units: 5x1mL, 1x5mL

2095.20	Bis(2-n-butoxyethyl) phthalate	[117-83-9]
2096.20	Bis(2-ethoxyethyl) phthalate	[605-54-9]
1224.24	Bis(2-ethylhexyl) phthalate	[117-81-7]
2097.14	Bis(2-methoxyethyl) phthalate	[34006-76-3]
2098.20	Bis(4-methyl-2-pentyl) phthalate	[259139-51-0]
1127.17	Butyl benzyl phthalate	[85-68-7]
2099.18	Diamyl phthalate	[131-18-1]
1226.16	Di-n-butyl phthalate	[84-74-2]
2100.20	Dicyclohexyl phthalate	[84-61-7]
1225.12	Diethyl phthalate	[84-66-2]
2101.20	Di-n-hexyl phthalate	[84-75-3]
2102.16	Diisobutyl phthalate	[84-69-5]
2094.10	Dimethyl phthalate	[131-11-3]
1229.26	Diisononyl phthalate	[28553-12-0]
1223.24	Di-n-octyl phthalate	[117-84-0]
2103.22	Hexyl 2-ethylhexyl phthalate	[75673-16-4]

Internal standards EPA Method 8061A
2000µg/mL in hexane; unit: 1x5mL

2053.14-2K-5HX	2053.14	Benzyl benzoate	[120-51-4]

Calibration Standards (Surrogate) EPA Method 8061A
3 Analytes, each 100µg/mL in hexane; unit: 1x5mL

2054.22-100-5HX	2054.22	Dibenzyl phthalate	[523-31-9]
2055.20-100-5HX	2055.20	Diphenyl isophthalate	[744-45-6]
2056.20-100-5HX	2056.20	Diphenyl phthalate	[84-62-8]

EPA 8082
PCBs by GC-ECD

Polychlorinated biphenyls by gas chromathography

Method 8082 is used to determine the concentration of polychlorinated biphenyls (PCBs) as Aroclors or as individual PCB congeners in extracts from solid and aqueous matrices. Capillary columns are employed together with electron capture detection (ECD) or electrolytic conductivity detectors (ELCD).

EPA 8100
PAHs in water by GC-FID

Polycyclic aromatic hydrocarbons in ground/waste water by GC-FID

Standard Test Method for the Determination of certain Polycyclic Aromatic Hydrocarbons in Ground/Waste water by GC-FID.

This test method is applicable for the determination of ppb levels of certain PAHs. The method provides the gas chromatographic conditions for the determination.

S-4114-ASS-5AN **16 Priority PAH, Control Mix**
16 Analytes, each 5 mL in acetonitrile in screw-capped bottle

The 16 Analytes are listed under EPA 610.
The QC control mixture is applicable to both methods.

Surrogate standards

1601.12-2K-5DC	2-Fluorobiphenyl	[321-60-8]	2000 µg/mL in dichloromethane, 5 mL
1313.10-2K-5DC	Fluoronaphthalene	[321-38-0]	2000 µg/mL in dichloromethane, 5 mL

EPA 8260 B
Volatile compounds by GC-MS

Volatile organic compounds by gas chromatography-mass spectrometry.

This method is used to determine volatile organic compounds in a variety of solid waste matrices.

S-4488-100-ME **EPA 8260 – Multiple Component Solution 1**
16 Analytes, each 100µg/mL in methanol; unit: 1x1mL

1300.6	Benzene	[71-43-2]
0392.10	n-Butylbenzene	[104-51-8]
2341.10	sec-Butylbenzene	[135-98-8]
2343.10	tert-Butylbenzene	[98-06-6]
1268.8	Ethylbenzene	[100-41-4]
2155.9	Isopropylbenzene	[98-82-8]
2155.9	p-Isopropyltoluene	[99-87-6]
0711.10	Naphthalene	[91-20-3]
1298.9	n-Propylbenzene	[103-65-1]
2558.8	Styrene	[100-42-5]
1264.7	Toluene	[108-88-3]
1270.9	1,2,4-Trimethylbenzene	[95-63-6]
1269.9	1,3,5-Trimethylbenzene	[108-67-8]
1267.8	o-Xylene	[95-47-6]
1266.8	m-Xylene	[108-38-3]
1265.8	p-Xylene	[106-42-3]

EPA 8270 C
Semivolatile compounds by GC-MS

Semivolatile organic compounds by gas chromatography-mass spectrometry.

This method is used to determine the concentration of semivolatile organic compounds in extracts prepared from many types of solid waste matrices, soils, air sampling media and water samples.

S-4489-100-ME

EPA 8270 – Multiple Component Solution 1

37 Analytes, each 100µg/mL in methanol; unit: 1x1mL

0732.12	Acenaphthene	[83-32-9]
0002.12	Acenaphthylene	[208-96-8]
2751.8	Acetophenone	[98-86-2]
2169.6	Aniline	[62-53-3]
1049.14	Anthracene	[120-12-7]
2130.7	Benzoic acid	[65-85-0]
0201.18	Benz[a]anthracene	[56-55-3]
0263.20	Benzo[b]fluoranthene	[205-99-2]
0265.20	Benzo[k]fluoranthene	[207-08-9]
0222.22	Benzo[ghi]perylene	[191-24-2]
0239.20	Benzo[a]pyrene	[50-32-8]
3842.6	p-Benzoquinone	[106-51-4]
3843.7	Benzyl alcohol	[100-51-6]
0212.18	Chrysene	[218-01-9]
0315.21	Dibenz[a]acridine	[224-42-0]
0203.22	Dibenz[a,h]anthracene	[53-70-3]
1100.12	Dibenzofuran	[132-64-9]
0244.24	Dibenzo[a,e]pyrene	[192-65-4]
0301.20	7,12-Dimethylbenz[a]anthracene	[57-97-6]
1406.8	2,4-Dimethylphenol	[105-67-9]
0260.16	Fluoranthene	[206-44-0]
0217.13	Fluorene	[86-73-7]
3844.6	Hydroquinone	[123-31-9]
0277.22	Indeno[1,2,3-cd]pyrene	[193-39-5]
3845.9	Isophorone	[78-59-1]
0005.21	3-Methylcholanthrene	[56-49-5]
0713.11	2-Methylnaphthalene	[91-57-6]
1403.7	2-Methylphenol	[95-48-7]
1404.7	3-Methylphenol	[108-39-4]
1358.7	4-Methylphenol	[106-44-5]
0711.10	Naphthalene	[91-20-3]
0220.20	Perylene	[198-55-0]
0816.14	Phenanthrene	[85-01-8]
1427.6	Phenol	[108-95-2]
3846.6	2-Picoline	[109-06-8]
0235.16	Pyrene	[129-00-0]
2277.5	Pyridine	[110-86-1]
3847.6	Resorcinol	[108-46-3]

S-4490-100-ME **EPA 8270 - Multiple Component Solution 1, 3 additional compounds**

0378.12	Carbazole	[86-74-8]
0186.1	Carbon disulfide	[95-87-4]
1411.8	4-Ethylphenol	[123-07-9]

EPA 8275 A
Semivolatile compounds in soils/sludges wastes using TE-GC-MS

Semivolatile organic compounds (PAHs and PCBs) in soils/sludges and solid wastes using thermal extracion capillary gas chromatographic mass spectrometry.

This test method provides a rapid procedure for the quantitative determination of targeted PCBs and PAHs in soils, sludges and solid wastes. The procedure is based on a thermal extraction capillary GC-MS.

S-4117-4K-DC **Internal standard mixture for EPA 8275A and 8270C**
6 Analytes, each 4000μg/mL in dichloromethane; units: 1x1mL, 5x1mL

1524.12	Acenaphthene-d10	[15067-26-2]
1024.18	Chrysene-d12	[1719-03-5]
1957.6	1,4-Dichlorobenzene-d4	[3855-82-1]
0978.10	Naphthalene-d8	[1146-65-2]
1534.20	Perylene-d12	[1520-96-3]
0389.14	Phenanthrene-d10	[1517-22-2]

EPA 8310
Polynuclear aromatic hydrocarbons

Polycyclic aromatic hydrocarbons (PAH) in ground water and wastes by high performance liquid chromatography with ultraviolet and fluorescence detector.

This test is used for the quantitative determination of certain polycyclic aromatic hydrocarbons (PAH) in ground water and wastes. The method provides HPLC conditions for the detection of ppb levels of certain PAHs.

Surrogate Mix

1958.12-2K-5AN	Decafluorobiphenyl	[434-90-2]	2000μg/mL in acetontirile, 5 mL

Miscellaneous methods

NORDTEST technical reports 497, 498, 499 Oil spill identification

www.nordtest.org

Proposed CEN method, Revision of the Nordtest Methology for Oil Spill Identification.

The project is a collaboration between the National Forensic Oil Spill Identification laboratories in Finland, Denmark, Norway, Sweden and Battelle Laboratories in the USA. The technical reports summarise the results of an extensive literature study. A database of diagnostic ratios for precently 28 crude oils and oil products has been established. GC chromatograms and ion chromatograms of diagnostic biomarkers for these oils are given. This method is proposed for the CEN system.

This report lists biomarkers to be analysed and gives recommendations for internal standards:

Internal standards (ISTD)

0348.18-200-10HX **Surrogate ISTD, o-Terphenyl, 2 mg/L, 10 mL**
Dilute to 200µg/mL working standard in hexane

0674.19-200-10HX **Recovery ISTD, 5·(H)-Androstane, 2 mg/mL, 10 mL**
Dilute to 200µg/mL working standard in hexane

S-4163-500-XY **Surrogate ISTD - PAH**
3 Analytes each 500µg/mL in xylene; unit: 1x1mL

0978.10	d8-Naphthalene	[0978.10]
0389.14	d10-Phenanthrene	[0389.14]
1024.18	d12-Chrysene	[1024.18]

S-4173-100-XY **Recovery ISTD - PAH**
3 Analytes each 100µg/mL in xylene; unit: 1x1mL

1534.20	d12-Perylene	[1520-96-3]
1524.12	d10-Acenaphthene	[15067-26-2]
1530.13	d10-Fluorene	[81103-79-9]

Analytical standard mixes

S-4160-100-10HX **Analytical Standard for n-alkanes, 10 mL**
Use 100µg/mL in hexane as a working standard
n-C10-C40 + Pristane

Other alternative mixes:

0629.20-K-IO	Analytical standard for phytane
S-4066-100-HX	Mixture with the n-alkanes + pristane, phytane
S-4106-100-HX	n-Alkane C10-C40 (even+pristane, phytane)

S-4110-100-CY n-Alkane C10-C40 (even and uneven+pristane, phytane)

See page 186 in the Petroleum section

S-4200-ASS-HX **Calibration Standard THC**

26 Analytes, each concentration as listed in hexane; unit : 6x1mL

The working standard concentrations are:

o-Terphenyl (ITSD)	200 µg/mL
5a-Androstane (ITSD)	200 µg/mL
n-Alkane C10-C40 (even + pristane, phytane)	1 µg/mL
n-Alkane C10-C40 (even + pristane, phytane)	5 µg/mL
n-Alkane C10-C40 (even + pristane, phytane)	10 µg/mL
n-Alkane C10-C40 (even + pristane, phytane)	20 µg/mL
n-Alkane C10-C40 (even + pristane, phytane)	50 µg/mL
n-Alkane C10-C40 (even + pristane, phytane)	100 µg/mL

S-4063-100-5DC **16 priority PAH, cocktail 1**

See the Environmental section, page 138.

16 EPA PAHS each 100 µg/mL in dichloromethane; unit: 1x5 mL

S-4191-100-5DC **PAH - others**

13 Analytes, each 100 µg/mL in dichloromethane; unit: 1x5 mL

0712.11	1-Methylnaphthalene	[90-12-0]
0728.12	2,3-Dimethylnaphthalene	[581-40-8]
0341.12	Biphenyl	[92-52-4]
0811.15	1-Methylphenanthrene	[832-69-9]
0768.16	3,6-Dimethylphenanthrene	[1576-67-6]
0350.14	1-Methylfluorene	[1730-37-6]
0352.15	9-Ethylfluorene	[2294-82-8]
0884.12	Dibenzothiophene	[132-65-0]
0449.14	2,8-Dimethyldibenzothiophene	[1207-15-4]
0220.20	Perylene	[198-55-0]
1100.12	Dibenzofuran	[132-64-91]
0938.8	Benzo[b]thiophene	[95-15-8]
1263.10	Decahydronaphthalene (decaline)	[91-17-8]

Please inquire for details

For a complete range of NPDs and PAHs standards and mixtures, see pages 143 and 129.

Single component standards

PAHs 58 compounds listed in the standard. All are available from Chiron, see the Compounds section page 295.

Biomarkers 38 compounds listed in the standard. More than 30 are available from Chiron, see the Compounds section page 225.

FOR 2001-09-03 No. 1157
Aromatics in produced water

S-4229-200-T

Aromatic Petroleum Pollutants

6 Analytes, each 200 µg/mL in toluene; units: 1x1 mL, 5x1 mL

0712.11	1-Methylnaphthalene	[90-12-0]
0725.12	1,6-Dimethylnaphthalene	[575-43-9]
0812.15	2-Methylphenanthrene	[2531-84-2]
0768.16	3,6-Dimethylphenanthrene	[1576-67-6]
0260.16	Fluoranthene	[206-44-0]
0239.20	Benzo[a]pyrene	[50-32-8]

Concentrations are designed according to customer requirements

S-4230-ASS-T

Aromatic Petroleum Pollutant IS-Mixtures

3 Analytes, each concentration as listed in toluene; units: 1x1 mL, 5x1 mL

1313.10	1-Fluoronaphthalene	[321-38-0]	400 µg/mL
1316.14	3-Fluorophenanthrene	[440-40-4]	200 µg/mL
1319.16	2-Fluorofluoranthene	[1691-66-3]	100 µg/mL

NS 9815
PAHs by GC

Water and Air Analysis

Gas Chromatographic Analysis for the Determination of Polycyclic Aromatic Hydrocarbons.

S-4008-100-T

Norwegian Standard (NS 9815)

16 Analytes, each 100 µg/mL in toluene; unit: 1x1 mL

0816.14	Phenanthrene	[85-01-8]
1049.14	Anthracene	[120-12-7]
0260.16	Fluoranthene	[206-44-0]
0235.16	Pyrene	[129-00-0]
0259.17	11H-Benzo[a]fluorene	[238-84-6]
0218.17	11H-Benzo[b]fluorene	[243-17-4]
0201.18	Benz[a]anthracene	[56-55-3]
0212.18	Chrysene	[218-01-9]
0263.20	Benzo[b]fluoranthene	[205-99-2]
0265.20	Benzo[k]fluoranthene	[207-08-9]
0239.20	Benzo[a]pyrene	[50-32-8]
0236.20	Benzo[e]pyrene	[192-97-2]
0277.22	Indeno[1,2,3-cd]pyrene	[193-39-5]
0203.22	Dibenz[a,h]anthracene	[215-58-7]
0222.22	Benzo[ghi]perylene	[191-24-2]
0244.24	Dibenzo[a,e]pyrene	[192-65-4]

Chapter III: Applications

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Chapter III-1: Environmental applications

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Priority pollutants

"Dirty dozens"

The Stockholm Convention agreed to phase out 12 important compounds or groups of substances that are causing adverse human effects and that are all considered persitent organic pollutants (POPs).

The 12 substances or classes of substances are:

EU water policy

In the field of water pollution, the EU Commission (European Commission Directive 2000/60/EC) proposes 32 priority substances to be phased out and 11 substances identified as hazardous.

In addition to the 12 compound groups listed by the Stockholm convention, these are:

Pollution from petroleum products

Oil spills is probably the type of pollution that occurs most widely. Hundreds of millions of gallons of petroleum has been spilled over the last centuries into landfields and marine waters from tankers, pipelines, production sites and underground storage tanks. Also input from seeps, natural disasters (e.g. Catarina) and wars (The gulf war) play an important role in the total petroleum input to the environment.

Typically groups of compounds analyzed in petroleum spill analysis are:

- Biomarkers:	Oil Spill Identification
- AlkylPAHS, HydroPAHs:	Oil spill identification and environmental assessment of productions sites
- Total Hydrocarbon Analysis:	Oil spill identification, Production sites and waste water analysis
- Hydrocarbons in water:	Production sites and waste water analysis
- Phenol, surfactants, production chemicals:	Production sites

Oil spill identification and biomarker fingerprinting

Petroleum samples from different sources are easily distinguished by their chemical composition. This is used in several aspects of oil spill analysis, like determination of oil spill leakages and identification of illegal marine spills. Also the biodegradation is studied using biomarker analysis due to the legal and huge economic aspects of petroleum spills.

The composition of a spilled oil may vary considerably from the original oil due to evaporization, weathering etc. Several EPA and ASTM methods have been modified in order to improve the specificity and sensitivity of oil and petroleum products analysis. Specific methods have been developed by groups in Europe, Canada and USA.

Chiron offers a wide range of specific compounds and mixtures specifically designed for the use in connection with these methods. Custom made mixes are available on order and request at reasonable prices.

The type of compounds used are
- Biomarkesrs, hopanes and steranes
- PAHs, alkylPAHs and dibenzothiophene profiling
- n-Alkanes, pristane, phytane, monoaromatics
- Adamantanes and sesquieterpanes

An excellent and recent book has been reported by Wang and Stout: " Oil Spill Environmental Forensics, Fingerprinting and Source Identification", Elsevier 2007.

Available biomarkers, PAHs and alkanes

(See the Compounds section for available single hopane and sterane biomarkers, alkylPAHs and alkanes)

Special mixes of biomarkers are made on request
For alkylPAH mixes, see the PAH section below, page 129 or inquire for custom mixes.
For alkane mixes, see the Petroleum applications section, page 167.

For reference consult the following reference methods and literature:
- Wang et al.; *Marine Pollution Bulletin* 47 (2003) 423-452, *Journal of Chromatography A*, 1038 (2004) 201-214.
- NORDTEST Methods (see the Methods section, page 104)
- ASTM method D 5739-06 (see the Methods section, page 67)
- Check this catalogue for a complete set of alkylated PAHs (the Compounds section, page 295 and onward) and Biomarkers (the Compounds section, page 225 and onward).

Methods

- NORDTEST Technical Reports 497, 498, 499: www.nordtest.org
Proposed CEN method
Revision of the Nordtest Methology for Oil Spill Identification.

The project is a collaboration between the National Forensic Oil Spill Identification laboratories in Finland, Denmark, Norway, Sweden and Battelle Laboratories in the USA. The technical reports summarize the results of an extensive literature study. A database of diagnostic ratios for precently 28 crude oils and oil products has been established. GC chromatograms and ion chromatograms of diagnostic biomarkers for these oils are given. This method is proposed for the CEN system.

This report lists biomarkers to be analysed and gives recommendations for internal standards:
- ASTM D 5739-06 Standard Practice for Oil Spill Identification by Gas Chromatography and Positive Ion Electron Impact Resolution Mass Spectrometry

Spills from petroleum production

Waste from offshore operated fields is an increasing concern. Typical pollutants from such installations include:

- BTEX
- PAH/NPD
- Phenols
- Organic acids
- Metals
- Radioactive elements
- Dispersed oil in water (Hydrocarbon Oil in Water)

References:
SFT: FOR-2001-09-03 No.1157: http://www.sft.no
OLF Recommended Guidelines for produced water: http://www.olf.no/hms/retningslinjer/?14821

Hydrocarbon oil in water OiW

ISO 9377-2 Water Quality – Determination of hydrocarbon oil index

The method of choice for the determination of oil and grease in water is ISO-Standard 9377-2, based on extraction with a hydrocarbon solvent like pentane or hexane. This test determines the hydrocarbon oil index in water by means of gas chromatography. The method is suitable for surface water, waste water, and water from sewage treatment plants, and allows the determination of the hydrocarbon oil index in concentrations above 0.1 mg/L.

The index is the sum of compounds with retention times between n-decane and n-tetracontane. Substances complying with this definition are long-chain or branched aliphatic, alicyclic, aromatic or alkylsubstituted aromatic hydrocarbons.

The former method ISO/TR 11046 from 1994 for the determination of mineral-oil content of soils and sediments has been withdrawn and is replaced by ISO 09377-2.

ISO 9377-2-Mod. This is a modified method for oil in water analysis of produced water from offshore petroleum production installations.

ISO 9377-2 is not applicable for volatile hydrocarbons, and a modification of the method is proposed by the OSPAR commission in order to include the determination of certain hydrocarbons with boiling points between 98 and 174 ºC from produced water.
The OSPAR Reference Method of Analysis for the Determination of the Dispersed Oil Content in Produced Water: Reference Number 2005-15.

Chiron offers a full range of products for ISO 9377-2 and the modified method. Several customized mixes and products which are not listed in the catalogue. Please inquire for a detailed offer. See the Methods section for the details of these two methods, page 18 and onward.

PAHs, hydroPAHs and thiophenes

PAHs are typical constituents of petroleum.

In particular one finds a range of

- Alkylnaphthalenes, -fluorenes, -phenanthrenes, -chrysenes, -pyrenes, -flouranthenes etc.
- Large PAHs
- Tetralines, decalines and hydrogenated 3-7 ring PAHs
- Alkylated sulfurcontaining compounds like thiophenes, benzothiophenes, dibenzothiophenes etc.

Chiron offers the widest range of PAHs available, including single components PAHs, PASHs and PANHs, hydroxy-, nitro- and aminoPAHs, internal standards and custom mixes, and recently "the John Fetzer Collection of Large PAHs and hydroPAHs". (All these compounds are included in the present catalogue.)

- AlkylPAH and dibenzothiophene and NPD mixes and cocktails: see the PAH section, page 129.
- To view the complete set of PAHs available, see the Compounds section, page 295.

International PAH-methods:

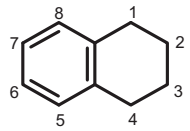
ASTM D 5186-03	SFC-method
ASTM D 5580-02	Gasoline
ASTM D 5739-06	Oil spill
ASTM D 5769-04	Aromatics in gasoline
ASTM D 6370-04	Aviation fuels
ASTM D 6591-06	Middle distillates
ISO 7981.1:2005	Water quality – six PAHs by tlc
ISO 7981.2:2005	Water quality – sixPAHs by HPLC
ISO 15753:2006	PAH in Animal and vegetable fats and oils
ISO 17993:2002	Water quality – 15 PAHs by HPLC
EPA 525.2	Water – Organics and PAHs by GC
EPA 527	Drinking water – pesticides and PBDEs by GC/MS
EPA 610	PAH in wastewater by HPLC and GC
EPA 8100	PAHs in water by GC-FID
EPA 8260	Volatile Compounds by GC-MS
EPA 8270C	Semivolatile Compounds by GC-MS
EPA 8310	Polycyclic Aromatic Hydrocarbons in Ground water and wastes

Alkylated tetralines and decalines

Alkylated decalines occur in oil and are used as indicators of petroleum pollutions in the Norwegian Standard NS, and have to be monitored and reported to the SFT by the production companies. Being the only company, Chiron now offers mixtures and single compounds as calibration standards for alkyldecaline analysis.

C1-C8 Decalines: See the Compounds section, page 238 or inquire.

Tetralines (1,2,3,4-tetrahydronaphthalenes)



Cycloalkanoaromatics (naphthenoaromatics) are usually the major constituents of the high boiling fraction of hydrocarbons. Mono- and diaromatics are especially abundant compared to polyaromatics in paraffinic-naphthenic crude oils from detrital sedimentary series.

0741.10	Tetraline (99%)	[119-64-2]	1000µg/mL, 1 mL in isooctane
0742.11	5-Methyltetraline (99%)	[2809-64-5]	1000µg/mL, 1 mL in isooctane
0743.11	6-Methyltetraline (99%)	[1680-51-9]	1000µg/mL, 1 mL in isooctane
0744.12	2-Ethyltetraline (99%)	[32367-54-7]	1000µg/mL, 1 mL in isooctane
0745.12	5-Ethyltetraline (99%)	[42775-75-7]	1000µg/mL, 1 mL in isooctane
0746.12	6-Ethyltetraline (99%)	[22531-20-0]	1000µg/mL, 1 mL in isooctane
0747.12	1,4-Dimethyltetraline (99%)	[4175-54-6]	1000µg/mL, 1 mL in isooctane
0748.12	1,8-Dimethyltetraline (99%)	[25419-33-4]	1000µg/mL, 1 mL in isooctane
0749.12	2,6-Dimethyltetraline (99%)	[7524-63-2]	1000µg/mL, 1 mL in isooctane
0750.12	2,7-Dimethyltetraline (99%)	[13065-07-1]	1000µg/mL, 1 mL in isooctane
0751.12	5,7-Dimethyltetraline (99%)	[21693-54-9]	1000µg/mL, 1 mL in isooctane
0753.13	1,1,6-Trimethyltetraline (99%)	[475-03-6]	1000µg/mL, 1 mL in isooctane
0752.13	1,5,8-Trimethyltetraline (98%)	[21693-51-6]	1000µg/mL, 1 mL in isooctane
0756.13	2,5,8-Trimethyltetraline (99%)	[30316-17-7]	1000µg/mL, 1 mL in isooctane
0754.14	2,2,5,7-Tetramethyltetraline (98%)	[23342-25-8]	1000µg/mL, 1 mL in isooctane
0755.18	6,7-Diethyl-1,1,4,4-tetramethyltetraline (99%)	[55741-10-1]	1000µg/mL, 1 mL in isooctane
0076.16	Tetraline Kit		

Hydronaphthalenes and decalines

0708.10	1,2-Dihydronaphthalene (99%)	[447-53-0]	1000µg/mL, 1 ml in isooctane
0717.10	Hexahydronaphthalene (96%)	[41375-99-9]	1000µg/mL, 1 ml in isooctane
0719.10	cis-Decalin (99%)	[493-01-6]	1000µg/mL, 1 ml in isooctane
0718.10	trans-Decalin (99%)	[493-02-7]	1000µg/mL, 1 ml in isooctane
1393.11	1-Methyldecalin (mixture of isomers)	[2958-75-0]	500µg/mL, 1 ml in isooctane
1395.13	2-Isopropyldecalin (mixture of isomers)		500µg/mL, 1 ml in isooctane
1394.15	1,1,4,4,5-Pentamethyldecalin (mix of isomers)		500µg/mL, 1 ml in isooctane
0077.7	Hydronaphthalene Kit 7 samples (7 compounds), 1 vial of each		

Alkylated decalines occur in oil and are used as indicators of petroleum pollution in the Norwegian Standard, and have to be monitored and reported to the SFT by the production companies on the shelf. Chiron now offers mixtures and single compounds as calibration standards for alkyldecaline analysis.
C1-C8 Decalines: 2-Alkylated Decalines: Please inquire.

Alkylphenols

Alkylphenols are used as surfactants in the drilling fluid.

The alkylphenols can be analyzed directly by GC-FID, GC-MS, GC-ECD etc. Derivatization prior to analysis is common in many standard methods, i.e. to pentafluorobenzoyl esters, methyl ethers and acetates.

Chiron offers single pure solutions of alkylphenols, and large range of internal standard, and reagents for derivatization.

Custom synthesis and custom manufactured solutions are available on request.

Please consult the phenol section below and the Compounds section.

Total hydrocarbon analysis THP

Petroleum spills from petroleum storage need to be analysed and quantified. The analytical chemists are challenged due to the weathering of the spills in the environment. Also, the spills may be a mixture of several petrochemical products or origin from different sources.

Chiron offers the largest range of single pure aromatics, aliphatics and naphthenic compounds on the market. Also, Chiron has prepared a broad range of standard products and special custom designed products for THP analysis:

BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
UST	Underwater Storage Tank Remediation
GRO	Gasoline Range Organics
DRO	Diesel Range Organics
RRO	Residual Range Organics
EPH	Extractable Petroleum Hydrocarbons

BTEX

S-4257-200-ME **BTEX Mixture 1**
S-4257-200-5ME 6 Analytes, each 200 µg/mL in methanol; units:1x1 mL, 1x5 mL

1300.6	Benzene	[71-43-2]	1267.8	o-Xylene	[95-47-6]
1264.7	Toluene	[108-88-2]	1266.8	m-Xylene	[108-38-3]
1268.8	Ethylbenzene	[100-41-4]	1265.8	p-Xylene	[106-42-3]

S-4218-2K-ME **BTEX Mixture 2**
S-4218-2K-5ME 6 Analytes, each 2000 µg/mL in methanol; units:1x1 mL, 1x5 mL

1300.6	Benzene	[71-43-2]	1267.8	o-Xylene	[95-47-6]
1264.7	Toluene	[108-88-2]	1266.8	m-Xylene	[108-38-3]
1268.8	Ethylbenzene	[100-41-4]	1265.8	p-Xylene	[106-42-3]

S-4219-2K-ME **BTEX Mixture 3**
S-4219-2K-5ME 7 Analytes, each 2000 µg/mL in methanol; units:1x1 mL, 1x5 mL

1300.6	Benzene	[71-43-2]	1267.8	o-Xylene	[95-47-6]
1264.7	Toluene	[108-88-2]	1266.8	m-Xylene	[108-38-3]
1268.8	Ethylbenzene	[100-41-4]	1265.8	p-Xylene	[106-42-3]
2151.5	MTBE	[1634-04-4]			

S-4423-50-PE
S-4426-50-5PE

ISO 9377-2 Mod Standard Mixture of n-Alkanes + BTEX I

C7+C10+ C20+C40+BTEX in n-Pentane
Determination of Hydrocarbon Oil in Water Index
10 Analytes, each 50 µg/mL in n-pentane; units: 1x1 mL, 1x5 mL, 1x10 mL

1300.6	Benzene	B	[71-43-2]	1265.8	p-Xylene	p-X	[106-42-3]
1264.7	Toluene	T	[108-88-2]	1240.7	n-Heptane	C7	[142-82-5]
1268.8	Ethylbenzene	E	[100-41-4]	1875.10	n-Decane	C10	[124-18-5]
1267.8	o-Xylene	o-X	[95-47-6]	1140.20	n-Eicosane	C20	[112-95-8]
1266.8	m-Xylene	m-X	[108-38-3]	1160.40	n-Tetracontane	C40	[4181-95-7]

S-4424-50-PE
S-4424-50-5PE

ISO 9377-2 Mod Standard Mixture of n-Alkanes + BTEX II

C7+C8+C9+C10+C20+C40+BTEX in n-Pentane
Determination of Hydrocarbon Oil in Water Index
12 Analytes; each 50 µg/mL in n-pentane; units: 1x1 mL, 1x5 mL, 10x1 mL

1300.6	Benzene	B	[71-43-2]	1268.8	Ethylbenzene	E	[100-41-4]
1264.7	Toluene	T	[108-88-2]	1245.9	n-Nonane	C9	[111-84-2]
1267.8	o-Xylene	o-X	[95-47-6]	1875.10	n-Decane	C10	[124-18-5]
1266.8	m-Xylene	m-X	[108-38-3]	1140.20	n-Eicosane	C20	[112-95-8]
1265.8	p-Xylene	p-X	[106-42-3]	1160.40	n-Tetracontane	C40	[4181-95-7]
1240.7	n-Heptane	C7	[142-82-5]				
1242.8	n-Octane	C8	[111-65-9]				

S-4395-50-PE
S-4395-50-5PE

ISO 9377-2 Mod Standard Mixture of n-Alkanes + BTEX III

C7+C8+C9+C10-C40 (all even)+BTEX in n-Pentane
Determination of Hydrocarbon Oil in Water Index
25 Analytes, each 50 µg/mL in n-pentane; units: 1mL, 1x5mL, 10x1mL

1300.6	Benzene	B	[71-43-2]	1138.18	n-Octadecane	C18	[593-45-3]
1264.7	Toluene	T	[108-88-2]	1140.20	n-Eicosane	C20	[112-95-8]
1268.8	Ethylbenzene	E	[100-41-4]	1142.22	n-Docosane	C22	[696-97-0]
1267.8	o-Xylene	o-X	[95-47-6]	1144.24	n-Tetracosane	C24	[646-31-1]
1266.8	m-Xylene	m-X	[108-38-3]	1146.26	n-Hexacosane	C26	[630-01-3]
1265.8	p-Xylene	p-X	[106-42-3]	1148.28	n-Octacosane	C28	[630-02-4]
1240.7	n-Heptane	C7	[142-82-5]	1150.30	n-Triacontane	C30	[638-68-6]
1242.8	n-Octane	C8	[111-65-9]	1152.32	n-Dotriacontane	C32	[544-85-4]
1245.9	n-Nonane	C9	[111-84-2]	1154.34	n-Tetratriacontane	C34	[14167-59-0]
1875.10	n-Decane	C10	[124-18-5]	1156.36	n-Hexatriacontane	C36	[630-06-8]
1132.12	n-Dodecane	C12	[112-40-5]	1158.38	n-Octatriacontane	C38	[7194-85-6]
1134.14	n-Tetradecane	C14	[629-59-4]	1160.40	n-Tetracontane	C40	[4181-95-7]
1136.16	n-Hexadecane	C16	[544-76-3]				

F-BTEX Internal Standards

The concept of F-PAH is now introduced by Chiron as a complete range of fluorinated internal standards for GC-MS analysis of the BTEX range compounds.

S-4193-2K-ME
S-4193-2K-4ME
S-4193-2K-10ME

F-BTEX ISTD Mixture

4 Analytes, each 2000 µg/mL in methanol; units: 1x4.5mL, 1x10mL

2017.6	Fluorobenzene	[462-06-6]
2018.7	2-Fluorotoluene	[95-52-3]
2010.12	1-Ethyl-4-fluorobenzene	[459-47-2]
2021.8	3-Fluoro-o-xylene (2,3-Dimethylfluorobenzene)	[443-82-3]

Gasoline

S-4220-2K-ME
S-4220-2K-5ME

GRO Mixture 1

9 Analytes, each 2000 µg/mL in methanol; units:1x1mL, 1x5 mL

1300.6	Benzene	[71-43-2]	0711.10	Naphthalene	[91-20-3]
1264.7	Toluene	[108-88-2]	1236.6	3-Methylpentane	[96-14-0]
1268.8	Ethylbenzene	[100-41-4]	1270.9	1,2,4-Trimethylbenzene	[95-63-6]
1267.8	o-Xylene	[95-47-6]	1269.9	1,3,5-Trimethylbenzene	[108-67-8]
1266.8	m-Xylene	[108-38-3]			

S-4221-2K-ME
S-4221-2K-5ME

GRO Mixture 2, PVOC

8 Analytes, each 2000 µg/mL in methanol; units:1x1mL, 1x5 mL

1300.6	Benzene	[71-43-2]	1266.8	m-Xylene	[108-38-3]
1264.7	Toluene	[108-88-2]	2151.5	MTBE	[1634-04-4]
1268.8	Ethylbenzene	[100-41-4]	1270.9	1,2,4-Trimethylbenzene	[95-63-6]
1267.8	o-Xylene	[95-47-6]	1269.9	1,3,5-Trimethylbenzene	[108-67-8]

S-4222-ASS-ME
S-4222-ASS-5ME

GRO Mixture 3, EPH Gasoline Range

9 Analytes, each concentration as listed in methanol; units: 1x1 mL, 1x5 mL

1300.6	Benzene	[71-43-2]	500 µg/mL
1264.7	Toluene	[108-88-2]	1500 µg/mL
1268.8	Ethylbenzene	[100-41-4]	1500 µg/mL
1266.8	m-Xylene	[108-38-3]	1000 µg/mL
1270.9	1,2,4-Trimethylbenzene	[95-63-6]	1000 µg/mL
1240.7	Heptane	[142-82-5]	500 µg/mL
1235.6	2-Methylpentane	[107-83-5]	1500 µg/mL
0443.8	2,2,4-Trimethylpentane	[540-84-1]	1500 µg/mL
1267.8	o-Xylene	[95-47-6]	1000 µg/mL

S-4223-K-ME
S-4223-K-5ME

GRO Mixture 4, UST Modified Gasoline Range

10 Analytes, each 1000 µg/mL in methanol; units: 1x1 mL, 1x5 mL

1300.6	Benzene	[71-43-2]	1265.8	p-Xylene	[106-42-3]
1264.7	Toluene	[108-88-2]	1270.9	1,2,4-Trimethylbenzene	[95-63-6]
1268.8	Ethylbenzene	[100-41-4]	1269.9	1,3,5-Trimethylbenzene	[108-67-8]
1267.8	o-Xylene	[95-47-6]	2151.5	MTBE	[1634-04-4]
1266.8	m-Xylene	[108-38-3]	0711.10	Naphthalene	[91-20-3]

2047.6-5K-ME

Internal Standards for Gasoline Range Analysis:
1-Chloro-4-fluorobenzene, 5000 µg/mL in methanol; units: 1x1 mL, 5x1 mL

2048.7-10K-ME

Calibration (Surrogate) Standard
ααα-Trifluorotoluene, 10000 µg/mL in methanol; units: 1x1 mL, 5x1 mL

Diesel

S-4226-K-HX

DRO Mixture 1, UST Modified Diesel Range
10 Analytes, each 1000 µg/mL in hexane; unit: 1x1 mL

1875.10	n-Decane	[124-18-5]	1140.20	n-Eicosane	[112-95-8]
1132.12	n-Dodecane	[112-40-5]	1142.22	n-Docosane	[629-97-0]
1134.14	n-Tetradecane	[629-59-4]	1144.24	n-Tetracosane	[646-31-1]
1136.16	n-Hexadecane	[544-76-3]	1146.26	n-Hexacosane	[630-01-3]
1138.18	n-Octadecane	[593-45-3]	1148.28	n-Octacosane	[630-02-4]

For other hydrocarbon mixtures see the PIONA section, page 180 and onward.

Internal standards for Diesel Range Analysis

0674.19-2K-HX	5-α-Androstane	2000 µg/mL in hexane, 1 mL
2051.18-10K-DC	1-Chlorooctadecane	10 000 µg/mL in dichloromethane, 1 mL

Calibration (Surrogate) Standards for Diesel Range Analysis

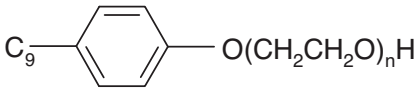
1601.12-10K-DC	2-Fluorobiphenyl	10000 µg/mL in dichloromethane
0348.18-2K-AC	o-Terphenyl	2000 µg/mL in acetone
0348.18-10K-DC	o-Terphenyl	10000 µg/mL in dichloromethane

Surfactants

Surfactants like nonylphenol ethoxylates (NPE), phthalates, adipates and linear alkylbenzene sulfonates (LAS) are common waste water pollutants. Recently perfluorinated carboxylic acids are recognized as potential environmental hazards due to the severe functions and persistency of these compounds. Chiron now offers standards for perfluorinated carboxylic compounds.

Alkylphenol ethoxylates

NEW



Octyl- and nonylphenol ethoxylates are widely used as surfactants in soap. Due to their potential endocrine disruptive behavior, these compounds are now banned or restricted in several countries.

A range of new ethoxylated nonylphenol isomers, pure isomer-mixtures and single n-nonyl derivatives for use as calibration standards, are now available, only from Chiron. These standards are useful as external calibration standards for GC and GC-MS analysis of waste water and waste water sludges.

Internal standards

2327.14-100-IO	4-n-Octylphenol-d17		100µg/mL	isooctane	1mL
2414.15-K-5IP	4-n-Nonylphenol-2,3,5,6-d4-OD	[358730-95-7]	1000µg/mL	isopropanol	5x5mL
2414.15-K-5AC	4-n-Nonylphenol-2,3,5,6-d4-OD	[358730-95-7]	1000µg/mL	acetone	5x5mL

Deuterated and ^{13}C labelled alkylethoxylates: Please inquire

Native standards

	4-n-Octylphenol ethoxylates				
1445.14-K-IO	4-n-Octylphenol	[1806-26-4]	1000µg/mL	isooctane	1mL
2286.16-K-IO	4-n-Octylphenol EO	[51437-89-9]	1000µg/mL	isooctane	1mL
2287.18-K-IO	4-n-Octylphenol 2EO	[51437-90-2]	1000µg/mL	isooctane	1mL
2309.20-K-IO	4-n-Octylphenol 3EO	[51437-91-3]	1000µg/mL	isooctane	1mL
3688.22-K-IO	4-n-Octylphenol 4EO	[51437-92-4]	1000µg/mL	isooctane	1mL
2367.4-KIT	n-Octylphenol EO Kit (Not including 3688.12)				Kit
	4-tert-Octylphenol ethoxylates				
1446.14-K-IO	4-tert-Octylphenol	[140-66-9]	1000µg/mL	isooctane	1mL
3689.16-K-IO	4-tert-Octylphenol EO, Please inquire	[2315-67-5]	1000µg/mL	isooctane	1mL
3753.18-K-IO	4-tert-Octylphenol 2EO, Please inquire	[2315-61-9]	1000µg/mL	isooctane	1mL
3754.20-K-IO	4-tert-Octylphenol 3EO, Please inquire	[2315-62-0]	1000µg/mL	isooctane	1mL
	Nonylphenol ethoxylates (nonylisomer mixtures)				
2044.15-K-IO	4-Nonylphenol, mixture of nonyl isomers	[84852-15-3]	1000µg/mL	isooctane	1mL
1833.17-K-IO	p-Nonylphenol EO	[104-35-8]	1000µg/mL	isooctane	1mL
1832.19-K-IO	p-Nonylphenol 2EO	[20427-84-3]	1000µg/mL	isooctane	1mL
1976.21-K-IO	p-Nonylphenol 3EO	[51437-95-7]	1000µg/mL	Isooctane	1mL
1977.23-K-IO	p-Nonylphenol 4-EO	[7311-27-5]	1000µg/mL	Isooctane	1mL
2366.5-KIT	Nonylphenol EO Kit (5 compounds)				Kit
	4-n-Nonylphenol ethoxylates				
1450.15-K-IO	4-n-Nonylphenol	[104-40-5]	1000µg/mL	isooctane	1mL
1978.17-K-IO	p-n-Nonylphenol EO		1000µg/mL	Isooctane	1mL
1979.19-K-IO	p-n-Nonylphenol 2EO	[20427-84-3]	1000µg/mL	Isooctane	1mL
3755.3-KIT	n-Nonylphenol ethoxylates Kit				Kit

Metabolites

1980.17-K-IO	2-(4-Nonylphenoxy) acetic acid isomer mixture	[3115-49-9]	1000µg/mL	Isooctane	1mL

Commercial mixes

S-4097-100MG	Imbentin-N/020 (n=0-4)		neat	100mg
S-4098-100MG	Imbentin-N/040 (n=1-7)		neat	100mg
S-4099-100MG	Imbentin-N/040 (n=2-9)		neat	100mg
2368.3-KIT	Imbentin Kit (3 samples)			Kit

Special mixes

Please inquire

Phthalates and adipates

Chiron offers to prepare mixed solutions of a large number of phthalate and adipate esters. Choose from the compounds listed below. Please inquire if you do not find the compound you need.

Phthalates

Internal standards

2478.10-100-IO	Dimethyl phthalate-3,4,5,6-d_4	[93951-89-4]	100µg/mL	isooctane	1mL
2892.12-K-IO	Diethyl phthalate-3,4,5,6-d_4	[93952-12-6]	1000µg/mL	isooctane	1mL
2479.16-100-IO	Di-n-butyl phthalate-3,4,5,6-d_4	[93952-11-5]	100µg/mL	isooctane	1mL
3124.18-100-IO	Di-n-pentyl phthalate-3,4,5,6-d_4	[358730-89-9]	100µg/mL	isooctane	1mL
2893.18-K-IO	Di-n-pentyl phthalate-3,4,5,6-d_4	[358730-89-9]	1000µg/mL	isooctane	1mL
3125.18-100-IO	Benzyl-n-butyl phthalate-3,4,5,6-d_4	[93951-88-3]	100µg/mL	isooctane	1mL
2361.24-100-IO	Di-n-octyl phthalate-3,4,5,6-d_4	[93952-13-7]	100µg/mL	isooctane	1mL
2894.24-K-IO	Bis(2-ethylhexyl) phthalate-3,4,5,6-d_4	[93951-87-2]	1000µg/mL	isooctane	1mL

Native standards

2094.10-10MG	Dimethyl phthalate	[131-11-3]	neat		10mg
1225.12-10MG	Diethyl phthalate	[84-66-2]	neat		10mg
2102.16-10MG	Di-iso-butyl phthalate	[84-69-5]	neat		10mg
1226.16-10MG	Di-n-butyl phthalate	[84-74-2]	neat		10mg
2097.14-10MG	Bis(2-methoxyethyl) phthalate	[34006-76-3]	neat		10mg
2099.18-10MG	Di-n-pentyl phthalate Diamyl phthalate	[131-18-1]	neat		10mg
2096.16-10MG	Bis(2-ethoxyethyl) phthalate	[605-54-9]	neat		10mg
1227.19-10MG	Butylbenzyl phthalate	[85-68-7]	neat		10mg
2055.20-100-HX	Diphenyl isophthalate	[744-45-6]	100µg/mL	hexane	1mL
2056.20-100-HX	Diphenyl phthalate	[84-62-8]	100µg/mL	hexane	1mL
2100.20-10MG	Dicyclohexyl phthalate	[84-61-7]	neat		10mg
2098.20-10MG	Bis(4-methyl-2-pentyl) phthalate	[259139-51-0]	neat		10mg
2101.20-10MG	Di-n-hexyl phthalate	[84-75-3]	neat		10mg
2054.22-100-HX	Dibenzyl phthalate	[523-31-9]	100µg/mL	hexane	1mL
2103.22-10MG	Hexyl 2-ethylhexyl phthalate	[75673-16-4]	neat		10mg
2095.20-10MG	Bis(2-n-butoxyethyl) phthalate	[117-83-9]	neat		10mg
1224.24-10MG	Bis(2-ethylhexyl)phthalate	[117-81-7]	neat		10mg
1223.24-10MG	Di-n-octyl phthalate	[117-84-0]	neat		10mg
1229.26-10MG	Di-iso-nonyl phthalate (isomer mixture)	[28553-12-0]	neat		10mg
2110.26-10MG	Di-n-nonyl phthalate	[84-76-4]	neat		10mg
3029.28-10MG	Di-iso-decyl phthalate	[26761-40-0]	neat		10mg
3126.26-KIT-MX	Mono+Diphthalate Kit				Kit

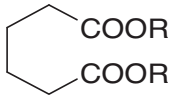
Metabolites (phthalate biomarkers)

NEW

It has been shown that dialkylphthalates are metabolized in the body to endocrine-active monoalkylphthalates. Ref: Stahlhet et.al., *Environ. Health Prospect*. Doi:10.1289/ehp. 9882 (http://dx.doi.org/) March 2007

3805. 9-K-IO	Monomethyl phthalate	[4376-18-5]	1000µg/mL	isooctane	1mL
3806.10-K-IO	Monoethyl phthalate	[2306-33-4]	Please inquire		
3807. 12-K-IO	Mono-n-butyl phthalate	[131-70-4]	1000µg/mL	isooctane	1mL
3590.15-K-IO	Mono-n-hexyl phthalate	[24539-57-9]	1000µg/mL	isooctane	1mL
3808.15-K-IO	Monobenzyl phthalate	[2528-16-7]	1000µg/mL	isooctane	1mL
3809. 16-K-IO	Mono(2-ethylhexyl) phthalate	[4376-20-9]	1000µg/mL	isooctane	1mL

Adipates



Internal standard

2276.22-K-IO	Bis(2-ethylhexyl) adipate-d_8	1000µg/mL	isooctane	1mL

Native adipates

1228.22-10MG	Bis(2-ethylhexyl) adipate	BEHA	[103-23-1]	neat		10mg
2212.22-K-IO	Di-n-octyl adipate		[123-79-5]	1000µg/mL	isooctane	1mL
2213.22-K-IO	Di-iso-octyl adipate		[1330-86-5]	1000µg/mL	isooctane	1mL
2214.24-K-IO	Di-n-nonyl adipate		[151-32-6]	1000µg/mL	isooctane	1mL
2218.24-K-IO	Di-iso-nonyl adipate		[33703-08-1]	1000µg/mL	isooctane	1mL
3127.5-KIT	Adipate Kit					Kit

Phtalate and adipate mixes

S-4002-K-IO
S-4002-K-10IO

Surfactants Mixture 1
7 Analytes, each 1000µg/mL in isooctane; units: 10x1 mL, 1x10 mL

1225.12	Diethyl phthalate	DEP	[84-66-2]
1228.22	Bis(2-ethylhexyl) adipate	BEHA	[103-23-1]
1223.24	Di-n-octyl phthalate	DNOP	[117-84-0]
1227.17	Benzyl butyl phthalate	BBP	[85-68-7]
1224.24	Bis(2-ethylhexyl) phthalate	BEHP	[117-81-7]
1229.26	Diisononyl phthalate	DINP	[28553-12-0]
1226.16	Di-n-butyl phthalate	DBP	[84-74-2]

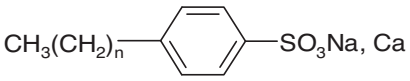
S-4074-100-5T

Surfactant Mixture 2
2 Analytes, each 100µg/mL in toluene; unit: 1x5 mL

1224.24	Bis(2-ethylhexyl) phthalate	BEHP	[117-81-7]
1223.24	Di-n-octyl phthalate	DNOP	[117-84-0]

LAS (linear alkylbenzene sulfonates) and ABS (alkylbenzenesulfonates)

NEW



Linear alkylsulfonates (LAS or linear alkylbenzenesulfonates) are man-made surface active agents.

LAS are produced with the benzenesulfonate group at the end or in the chain, and it gives rice to different chemical properties. Commercial mixtures typically have an alkyl chain of C10-C14. LAS is often referred to as "soft type" alkyl benzenesulfonates. LAS are biodegradable due to its linear alkyl chain.

Alkyl benzenesulfonates (ABS or branched alkyl benzenesulfonates) have a branched alkyl chain and are not easily biodegraded. ABS are often referred to as a "hard type" alkylbenzenesulfonate.

ABS are essentially replaced by LAS on the surfactant market.

LAS and ABS standards

2909.14-100-ME	Sodium p-n-octylbenzenesulfonate	[6149-03-7]	100µg/mL	methanol	1mL
2910.16-100-ME	Sodium p-n-decylbenzenesulfonate	[2627-06-7]	100µg/mL	methanol	1mL
2911.17-100-ME	Sodium p-n-undecylbenzenesulfonate	[20466-34-6]	100µg/mL	methanol	1mL
2560.18-100-ME	Calcium p-n-dodecylbenzenesulfonate	[26264-06-2]	100µg/mL	methanol	1mL
2561.18-100-ME	Sodium p-n-dodecylbenzenesulfonate	[2211-98-5]	100µg/mL	methanol	1mL
2561.18-K-ME	Sodium p-n-dodecylbenzenesulfonate	[2211-98-5]	1000µg/mL	methanol	1mL
2562.19-100-ME	Sodium p-n-tridecylbenzenesulfonate	[14356-40-2]	100µg/mL	methanol	1mL
2562.19-K-ME	Sodium p-n-tridecylbenzenesulfonate	[14356-40-2]	1000µg/mL	methanol	1mL
2562.19-100-ME	Sodium p-n-tridecylbenzenesulfonate	[14356-40-2]	100µg/mL	methanol	1mL
2912.20-100-ME	Sodium p-n-tetradecylbenzenesulfonate	[1797-33-7]	100µg/mL	methanol	1mL
2913.7-KIT	LAS Kit				Kit

Commercial technical mixes

3722.18-K-ME	Dodecylbenzenesulfonic acid, mixture of C12	LAS 12, soft	[27176-87-0]	1000µg/mL	methanol	1mL
3722.18-100MG	Dodecylbenzenesulfonic acid, mixture of C12	LAS 12, soft	[27176-87-0]	neat		100mg
3723.18-K-ME	Sodium dodecylbenzenesulfonate, mixture of C10-C14	ABS 10-14 Na, Hard	[25155-30-0]	1000µg/mL	methanol	1mL
3723.18-100MG	Sodium dodecylbenzenesulfonate, mixture of C10-C14	ABS 10-14 Na, Hard	[25155-30-0]	neat		100mg
3724.18-K-ME	Sodium dodecylbenzenesulfonate, mixture of C10-C14	LAS 10-14, Soft	[69669-44-9]	1000µg/mL	methanol	1mL
3724.18-100MG	Sodium dodecylbenzenesulfonate, mixture of C10-C14	LAS 10-14, Soft	[69669-44-9]	neat		100mg
3724.18-100MG	Sodium dodecylbenzenesulfonate, mixture of C10-C14, 38% water	LAS 10-14, Soft	[69669-44-9]	neat		100mg

International methods (see the Methods section for details)

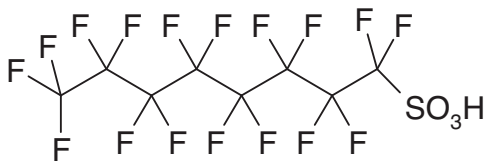
EPA 506 Rev 1.1, page 87.
EPA 606, page 93.
EPA 8061 A, page 99.

NEW

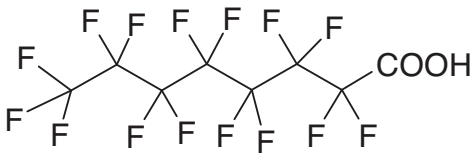
Linear perfluoroalkyl sulfonates acids and alcohols PFAs

Perfluorooctane sulfonate (**PFOS**) and related perfluorinated compounds, e.g. perfluorohexane sulfonate (**PFHS**), perfluorobutane sulfonate (**PFBS**), perfluorooctane sulfonamide (**FOSA**) and perfluorooctanoic acid (**PFOA**) have received wide attention during the last three years.

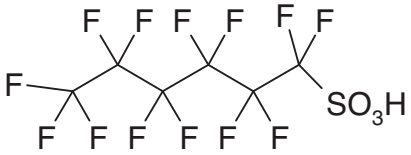
The extraordinary strength of the carbon-fluorine bond contributes to the stability of the fluorochemicals. These compounds repel water and oil. PFOS etc. also reduce the surface tension for materials such as coatings for textiles, papers, packaging, fire-fighting foams, herbicides and pesticides.



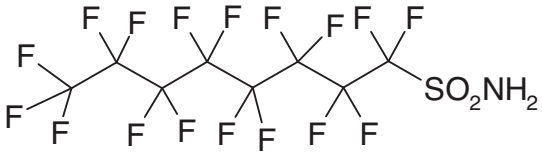
PFOS



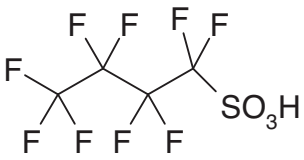
PFOA



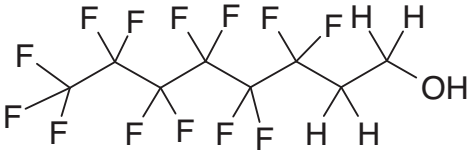
PFHS



FOSA



PFBS



6:2 PTOH

Internal standards

Internal standards based on deuterium/^{13}C isotope labelling and other cost-efficient standards are under development and will be available.

Native standards (for details, see the Compounds section page 383)

Chiron offer a large range of standards for all groups of commercial perfluoro alkane derivatives.

Metabolites

These compounds are extremely stable and degrade very slowly.
However, the current switch to telomeric acids has given rice to studies on the degradation of these substances.

Several telomers are available and telomeric metabolites are in development, including internal standards.

Phenols and phenol analysis

Phenols are widely used in the industry as additives as well as intermediates.

Alkylphenols are commonly used as surfactants, oil additives, antioxidants, herbicides, insecticides, polymers and polymerization reagents, vitamins etc. Ethoxylated nonylphenols are used as surfactants in detergents. Alkylphenols also occur as by-products of various industrial uses, i. e. pulp and paper processing, coke production and gas liquification.

Chlorophenols are formed by the use of chlorine as a bactericide in water treatment plants. Chlorophenols are also added to enhance the anti-bacterial properties of products. However, due to an increased lipophilicity, the chlorophenols tend to bioaccumulate. This increases the toxicity, and these compounds are thus banned in certain countries.

Alkylated derivatives of the nitrophenols are commonly used as herbicides and pesticides. These substances tend to be more toxic than those without the nitrofunction.

Toxic and environmental hazards

Phenols are toxic compounds. They are easily absorbed via the skin, by inhalation or by ingestion. Being soluble in both polar and non-polar solvents they are highly mobile in soil and in aquatic systems and are suspected endocrine disruptors. Nonylphenol ethoxylates are listed as priority pollutants in water by the EU Commission.

The large quantities of detergents used in households, industries and agricultural applications constitute a major issue of concern. Nonionic phenolic surfactants are quite resistant to biodegradation due to the branched carbon alkyl chain, and their metabolites may reach the surface and groundwater. These compounds are commonly found in the waste water and the sludge from waste water treatment plants.

Phenolic compounds are extensively used both in the onshore as well as the offshore petroleum industry, and are a hazard of contamination of fresh water and the sea. It is estimated that phenols up to alkyl-C5 contributes with approximately 5 % of the total environmental risk in offshore-operated fields.

As a consequence, a number of methods have been developed to test for the content of phenols in drinking water, from water treatment plants, in soil and as industrial waste in onshore as well as off-shore activities.

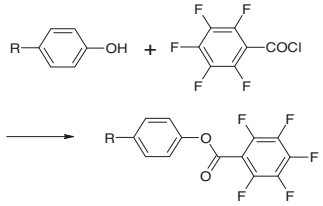
Methods of analysis

Low molecular weight phenols are often analyzed by GC-FID, GC-ECD or GC-MS methods, using columns like DB-XLB and DB-5ms columns from Agilent, or similar types.

Phenols

Derivatization

Phenols are often derivatized before determination, and analyzed as pentafluorobenzoyl- (PFB), TMS-ether, or methyl derivatives. In MS the PFB compound will have a molecular ion of m/z 194 units higher than that of the parent compound.



Derivatization by PFBCl before analysis by GC-ECD or GC-MS.

Derivatizing agent

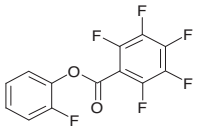
1647.7	Perfluorobenzoyl chloride 1 g		

Internal standards

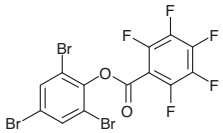
2057.6	2-Fluorophenol	[367-12-4]	1 g
2058.7	4-Fluoro-3-methylphenol	[452-70-0]	1 g
2059.7	4-Fluoro-2-methylphenol	[452-72-2]	1 g
2060.5	2,4,6-Tribromophenol	[118-79-6]	1 g
2061.6	2,4-Dibromophenol	[615-58-7]	1 g
2052.8	d_4-4-Ethylphenol	[340256-40-8]	100 mg

Internal standard PFB-derivatives

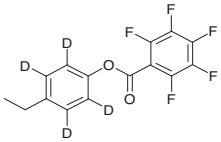
2088.13	2-Fluorophenol-PFB		1000µg/mL in isopropanol
2089.14	4-Fluoro-3-methylphenol-PFB		1000µg/mL in isopropanol
2090.14	4-Fluoro-2-methylphenol-PFB		1000µg/mL in isopropanol
2091.13	2,4,6-Tribromophenol-PFB	[937016-13-2]	1000µg/mL in isopropanol
2092.13	2,4-Dibromophenol-PFB	[136264-99-8]	1000µg/mL in isopropanol
2093.15	d4-4-Ethylphenol-PFB	[100-58-8]	1000µg/mL in isopropanol



2088.13



1921.13



2093.15

Please inquire for individual PFB derivatives of additional analytes.

Internal standards

Chiron is offering a wide range of nearly fluoro- and deuterated alkylphenols as pure internal standards.
See the Compounds section for available internal standards, page 374.

Alkylated phenols

Chiron is offering a range of nearly 50 alkylphenols and deuterated alkylphenols as pure chemical standards.
See the Compounds section for available alkylphenols, page 375.

Alkylphenol mixes

S-4060-ASS-5AC

Alkylated phenol mixture 1

8 Analytes, each concentration as listet in aceton; unit: 1x5 mL

1358.7	p-Cresol	[106-44-5]	33.80 mg/mL
1364.8	3-Ethylphenol	[620-17-7]	6.54 mg/mL
1360.8	3,5-Dimethylphenol	[108-68-9]	6.54 mg/mL
1362.9	2,4,6-Trimethylphenol	[527-60-6]	3.80 mg/mL
1359.10	2-tert-Butylphenol	[88-18-6]	0.37 mg/mL

1361.10	3-tert-Butylphenol	[585-34-2]	0.37 mg/mL
1357.10	4-n-Butylphenol	[1638-22-8]	0.37 mg/mL
1363.11	4-Pentylphenol	[14938-35-3]	1.62 mg/mL

S-4093-5K-IO

Alkylated phenol mixture 2

29 Analytes, each 5000µg/mL in isooctane, pestipure; units: 1x1 mL, 5x1 mL

Prod.no.	Compound	Purity	CAS no.
1427.6	Phenol	99.9 %	[108-95-2]
1403.7	o-Cresol	99.6 %	[95-48-7]
1404.7	m-Cresol	98.1 %	[108-39-4]
1358.7	p-Cresol	99.1 %	[106-44-5]
1406.8	2,4-Dimethylphenol	99.8 %	[105-67-9]
1407.8	2,5-Dimethylphenol	>99 %	[95-87-4]
1360.8	3,5-Dimethylphenol	99.9 %	[108-68-9]
1411.8	4-Ethylphenol	99.2 %	[123-07-9]
1415.9	2-n-Propylphenol	99.7 %	[644-35-9]
1412.9	2,3,5-Trimethylphenol	98+%	[697-82-5]
1417.9	4-n-Propylphenol	98.4 %	[645-56-7]
1362.9	2,4,6-Trimethylphenol	99.9 %	[527-60-6]
1423.10	4-tert-Butylphenol	99.5 %	[98-54-4]
1424.10	4-Isopropyl-3-methylphenol	99.8 %	[3228-02-2]
1357.10	4-n-Butylphenol	98.0 %	[1638-22-8]
1430.11	2-tert-Butyl-4-methylphenol	99.2 %	[2409-55-4]
1429.11	4-tert-Butyl-2-methylphenol	98.2 %	[98-27-1]
1363.11	4-n-Pentylphenol	98 %	[14938-35-3]
1520.12	2,5-Diisopropylphenol	83.9 %	[35946-91-9]
1434.12	2,6-Diisopropylphenol	99.9 %	[2078-54-8]
1435.12	2-tert-Butyl-4-ethylphenol	99.2 %	[96-70-8]
1436.12	6-tert-Butyl-2,4-dimethylphenol (2-tert-Butyl-4,6-dimethylphenol)	99.3 %	[1879-09-0]
1440.13	4-n-Heptylphenol	99.9 %	[1987-50-4]
1446.14	4-tert-Octylphenol	96.5 %	[140-66-9]
1443.14	2,6-Di-tert-butylphenol	99.7 %	[128-39-2]
1445.14	4-n-Octylphenol	99.2 %	[1806-26-4]
1448.15	2,6-Di-tert-butyl-4-methylphenol	99.9 %	[128-37-0]
1450.15	4-n-Nonylphenol	99.3 %	[104-40-5]
1522.15	2-Methyl-4-tert-octylphenol	94.3 %	[2219-84-3]

S-4094-100-IO

Alkylated phenol mixture 3

31 Analytes, each 100µg/mL in isooctane, pestipure; units: 1x1 mL, 5x1mL

Prod.no.	Compound	Purity	CAS no.
1427.6	Phenol	99.9 %	[108-95-2]
1403.7	o-Cresol	99.6 %	[95-48-7]
1404.7	m-Cresol	98.1 %	[108-39-4]
1358.7	p-Cresol	99.1 %	[106-44-5]
1406.8	2,4-Dimethylphenol	99.8 %	[105-67-9]
1407.8	2,5-Dimethylphenol	>99 %	[95-87-4]
1360.8	3,5-Dimethylphenol	99.9 %	[108-68-9]
1411.8	4-Ethylphenol	99.2 %	[123-07-9]
1415.9	2-n-Propylphenol	99.7 %	[644-35-9]
1412.9	2,3,5-Trimethylphenol	98+%	[697-82-5]

1417.9	4-n-Propylphenol	98.4 %	[645-56-7]
1362.9	2,4,6-Trimethylphenol	99.9 %	[527-60-6]
1423.10	4-tert-Butylphenol	99.5 %	[98-54-4]
1424.10	4-Isopropyl-3-methylphenol	99.8 %	[3228-02-2]
1357.10	4-n-Butylphenol	98.0 %	[1638-22-8]
1430.11	2-tert-Butyl-4-methylphenol	99.2 %	[2409-55-4]
1429.11	4-tert-Butyl-2-methylphenol	98.2 %	[98-27-1]
1363.11	4-n-Pentylphenol	98 %	[14938-35-3]
1520.12	2,5-Diisopropylphenol	83.9 %	[35946-91-9]
1434.12	2,6-Diisopropylphenol	99.9 %	[2078-54-8]
1435.12	2-tert-Butyl-4-ethylphenol	99.2 %	[96-70-8]
1436.12	6-tert-Butyl-2,4-dimethylphenol (2-tert-Butyl-4,6-dimethylphenol)	99.3 %	[1879-09-0]
1440.13	4-n-Heptylphenol	99.9 %	[1987-50-4]
1446.14	4-tert-Octylphenol	96.5 %	[140-66-9]
1443.14	2,6-Di-tert-butylphenol	99.7 %	[128-39-2]
1445.14	4-n-Octylphenol	99.2 %	[1806-26-4]
1515.14	2,4-Di-sec-butylphenol	92.7 %	[1849-18-9]
1448.15	2,6-Di-tert-butyl-4-methylphenol	99.9 %	[128-37-0]
1450.15	4-n-Nonylphenol	99.3 %	[104-40-5]
1521.15	4,6-Di-tert-butyl-2-methylphenol	99.9 %	[616-55-7]
1522.15	2-Methyl-4-tert-octylphenol	94.3 %	[2219-84-3]

S-4419-100-5IO

Alkylated Phenol mixture 4

3 Analytes, each 100 µg/mL in isooctane; unit: 1x5mL

Prod.no.	Compound	CAS no.
1437,12	4-n-Hexylphenol	[2446-69-7]
1442,14	2,4-Di-tert-butylphenol	[96-76-4]
1443,14	2,6-Di-tert-butylphenol	[128-39-2]

S-4440-ASS-5IO

Alkylated phenol mixture 5

18 Analytes, each concentration as listet in isooctane; unit: 1x5mL

Prod.no.	Compound	CAS no.	Concentration
1427.6	Phenol	[108-95-2]	5000µg/mL
1404.7	m-Cresol	[108-39-4]	2000µg/mL
1411.8	4-Ethylphenol	[123-07-9]	200µg/mL
1406.8	2,4-Dimethylphenol	[105-67-9]	200µg/mL
1413.9	2,3,6-Trimethylphenol	[2416-94-6]	200µg/mL
1417.9	4-n-Propylphenol	[645-56-7]	200µg/mL
1422.10	4-sec-Butylphenol	[99-71-8]	200µg/mL
1357.10	4-n-Butylphenol	[1638-22-8]	200µg/mL
1430.11	2-tert-Butyl-4-methylphenol	[2409-55-4]	200µg/mL
1363.11	4-n-Pentylphenol	[14938-35-3]	200µg/mL
1437.12	4-n-Hexylphenol	[2446-39-7]	200µg/mL
1435.12	2-tert-Butyl-4-ethylphenol	[96-70-8]	200µg/mL
1503.13	2-Cyclohexyl-5-methylphenol	[1596-13-0]	200µg/mL
1440.13	4-n-Heptylphenol	[1987-50-4]	200µg/mL
1445.14	4-n-Octylphenol	[1806-26-4]	200µg/mL
1441.14	Di-sec-butylphenol, mixture of isomers	[5510-99-6]	200µg/mL
1450.15	4-n-Nonylphenol	[104-40-5]	200µg/mL
1448.15	2,6-Di-tert-butyl-4-methylphenol	[128-37-0]	200µg/mL

S-4411-ASS-IP

Deuterated alkylphenol mixture

6 Analytes, each concentration in isopropanol; unit: 1x1mL

Product description:

Prod.no.	Compound	CAS no.	Concentration
2280,7	p-Cresol-d_8	[190780-66-6]	3000 µg/g
2399,8	3,5-Dimethylphenol-2,4,6-d_3, OD	-	2000 µg/g
2348,9	4-n-Propylphenol-d_{12}	[352431-21-1]	2000 µg/g
2282,10	4-tert-Butyl-d_9-phenol-2,3,5,6-d_4	[225386-58-3]	1000 µg/g
2410,11	4-n-Pentyl-d_{11}-phenol	-	1000 µg/g
2327,14	4-n-Octylphenol-d_{17}	-	500 µg/g

Chloro- and nitrophenol standards

Custom solutions are available from these chloro- and nitrophenolic compounds:

2062.6	2-Chlorophenol	[95-57-8]
2063.7	2-Chloro-5-methylphenol	[615-74-7]
2064.6	2,4-Dichlorophenol	[120-83-2]
2065.6	2,5-Dichlorophenol	[583-78-8]
2066.6	2,3-Dichlorophenol	[576-24-9]
2067.6	3-Chlorophenol	[108-43-0]
2068.6	4-Chlorophenol	[106-48-9]
2069.6	2,6-Dichlorophenol	[87-65-0]
2070.7	4-Chloro-2-methylphenol	[1570-64-5]
2071.7	4-Chloro-3-methylphenol	[59-50-7]
2072.6	2,3,6-Trichlorophenol	[933-75-5]
2073.6	2,3,5-Trichlorophenol	[933-78-8]
2074.6	2,3,5,6-Tetrachlorophenol	[935-95-5]
2075.6	2,4,5-Trichlorophenol	[95-95-4]
2076.6	2,4,6-Trichlorophenol	[88-06-2]
2077.6	2,3,4-Trichlorophenol	[15950-66-0]
2078.6	3,5-Dichlorophenol	[591-35-5]
2080.6	3,4-Dichlorophenol	[95-77-2]
2081.6	2,3,4,5-Tetrachlorophenol	[4901-51-3]
2082.6	3,4,5-Trichlorophenol	[609-19-8]
2084.6	Pentachlorophenol	[87-86-5]
2085.6	2-Nitrophenol	[88-75-5]
2086.6	3-Nitrophenol	[554-84-7]
2087.6	4-Nitrophenol	[100-02-7]
2079.6	2,4-Dinitrophenol	[51-28-5]
2083.7	2-Methyl-4,6-Dinitrophenol	[534-52-1]

International methods

Please consult the Methods section for details.

- EPA 528 Rev. 1.0 Phenols in Drinking Water by Solid Phase Extraction and GC-MS, page 90.
- EPA 8041 A Phenols as PFB Derivatives by GC-ECD or FID, page 98.
- EPA 604 Phenols by GC-FID and Phenols as PFB Derivatives (GC-ECD), page 92.

PAH analysis and PAH mixtures

Polycyclic aromatic hydrocarbons (PAHs) and especially the sixteen ones chosen by the EPA as priority pollutants, the so-called EPA-PAHs, are analytes that have to be determined very frequently in environmental and food analysis, occupational monitoring and in toxicological studies.

The PAHs are known to possess highly carcinogenic and mutagenic properties. The toxic effects are related to benzo[a]pyrene which is set to a basis of 1.0. Large variations in the group of PAHs are observed. The toxicity is often related to structural patterns, so called QSARs, e.g. in the bay and the fjord regions. The carcinogenic impact can be put down to the metabolites of the corresponding parent PAHs. The metabolites are more water soluble, and are formed by epoxidation, hydroxylation, glucuronidation or sulfatation. The initial step is the activation via the Cyt. P450 system.

TOXICITY OF PAH-COMPOUNDS RELATIVE TO BENZO[A]PYRENE

	Ref.1	Ref.2	Ref.3	Ref.4-6	Ref. 8	Genotoxicity (Ref 7)	Cancerogen. (Ref 7)
Dibenzo[a,l]pyrene			100	100		(+)	+
Dibenzo[a,h]pyrene			1.0	1.2		(+)	+
Benzo[a]pyrene	1.0	1.0	1.0	1.0	1.0	+	+
Dibenzo[a,e]fluoranthene				1.0			
Dibenzo[a,e]pyrene				1.0		+	+
Dibenz[a,h]anthracene	1.0	1.0	1.0	0.89	1.0	+	+
Anthanthrene				0.28		+	+
Dibenz[a,i]pyrene			0.1			+	+
Benzo[b]fluoranthene	0.1	0.1	0.1	0.11	0.1	+	+
Indeno[1,2,3-cd]pyrene	0.1	0.1	0.1	0.067	0.1	+	+
Benzo[j]fluoranthene		0.1	0.1	0.045		+	+
Benz[k]fluoranthene	0.1	0.1	0.1	0.037	0.01	+	+
Benz[a]anthracene	0.1	0.1	0.1	0.014	0.1	+	+
Dibenz[a,c]anthracene	0.1						
Cyclopenta[cd]pyrene	0.1		0.1	0.012		+	+
Chrysene	0.01	0.01	0.1	0.026	0.001	+	+
5-Methylchrysene						+	+
Benzo[c]phenanthrene						(+)	+
Benzo[e]pyrene	0.01			0		+	(?)
Benzo[ghi]perylene	0.01	0.01		0.012		+	-
Triphenylene						+	-
Acenaphthylene	0.001	0.01				(?)	no studies
Fluoranthene	0.001	0.01				+	(?)
1-Methylphenanthrene	0.001					+	-
Coronene	0.001					(+)	(?)
Perylene	0.001					+	-
Benzo[ghi]fluoranthene						(+)	(-)
Naphthalene	0.001					-	?
Anthracene	0.01	0.01				-	-
Acenaphthene	0.001	0.001			0	(?)	(?)
Fluorene	0.001	0				-	-
Phenanthrene	0.001	0		0.00064		(?)	(?)
Pyrene	0.001	0.001		0		(?)	-
Benzo[a]fluorine						(?)	(?)
Benzo[b]fluorine						(?)	(?)

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- F. Kalberlah, N. Frijus-Plessen and M. Hassauer, Altlasten-Spektrum, **5**, pp 231-237 (**1995**).
- P. McClure and R. Scheny, Fifteenth International Symposium on Polycyclic Aromatic Compounds, Belgirate, Italy, 19-22 Sept **1995**, p. 161.
- P. Müller , B. Leece and D. Raha, Fifteenth International Symposium on Polycyclic Aromatic Compounds, Belgirate, Italy, 19-22 Sept **1995**, p. 159-160.
- P. Müller , B. Leece and D. Raha, Dose Respons Assessment PAH. Ottawa, Ontario Ministry of the Environment and Energy, p. 197 (**1995**).
- P. Müller , B. Leece and D. Raha, **Scentific Criteria Document for Multimedia Environmetal Standards Development: Polycyclic Aromatic Hydrocarbons (PAH)** Dose Respons Assessment PAH. Ottawa, Ontario Ministry of the Environment and Energy, p. 203 (**1996**).
- IPCS (International Programme on Chemical Safety), Environmental Health Criteria **202**, WHO (**1998**).
- US Environmental Protection Agency, Provisional Guidance for Quantitative Risk Assessment of Polycyclic Hydrocarbons. EPA/600/R-93/089 (**1993**).

Internal standards

F-PAHs® internal standards

Monofluorinated PAHs (F-PAHs®) are closely similar to the parent PAHs in terms of chemical and physical properties.
The close similarities between the F-PAH® and the parent PAHs makes them ideal internal standards in a broad range of analytic and mechanistic applications and studies.

With the introduction of the mono F-PAH® standards, Chiron has set a new benchmark in PAH-analysis:

- Improved and more efficient results
- Cheaper than isotopically labelled counterparts, deuterium and ^{13}C
- F-PAHs® are separated from the parent PAH by GC and HPLC
- F-PAHs® are easy to detect by MS and UV/Fluorescence
- Additional detection information with AED, NMR and MS techniques
- There is no scrambling, like sometimes observed with deuterium
- There is no known occurrence in nature, like methylated analogous

Single components F-PAHs (1, 5 or 10x1mL)

1313.10-10-IO	1-Fluoronaphthalene	[321-38-0]	10µg/mL	isooctane
1313.10-100-IO	1-Fluoronaphthalene	[321-38-0]	100µg/mL	isooctane
1314.12-10-T	5-Fluoroacenaphthylene	[17521-01-6]	10µg/mL	toluene
1314.12-100-T	5-Fluoroacenaphthylene	[17521-01-6]	100µg/mL	toluene
2364.11-100-IO	2-Fluoro-6-methylnaphthalene	[324-42-5]	100µg/mL	isooctane
1315.13-10-T	2-Fluorofluorene	[343-43-1]	10µg/mL	toluene
1315.13-100-T	2-Fluorofluorene	[343-43-1]	100µg/mL	toluene
1316.14-10-T	3-Fluorophenanthrene	[440-40-4]	10µg/mL	toluene
1328.14-10-T	2-Fluorophenanthrene	[523-41-1]	10µg/mL	toluene
1316.14-100-T	3-Fluorophenanthrene	[440-40-4]	100µg/mL	toluene
1328.14-100-T	2-Fluorophenanthrene	[523-41-1]	100µg/mL	toluene
2873.15-50-IO	3-Fluoro-6-methylphenanthrene	[84194-32-2]	50µg/mL	isooctane
1319.16-10-T	3-Fluorofluoranthene	[1691-66-3]	10µg/mL	toluene
1319.16-100-T	3-Fluorofluoranthene	[1691-66-3]	100µg/mL	toluene
1318.16-10-T	1-Fluoropyrene	[1691-65-2]	10µg/mL	toluene
1318.16-100-T	1-Fluoropyrene	[1691-65-2]	100µg/mL	toluene
1900.18-10-T	1-Fluorochrysene		10µg/mL	toluene
1900.18-100-T	1-Fluorochrysene		100µg/mL	toluene
1317.18-10-T	3-Fluorochrysene	[36288-22-9]	10µg/mL	toluene

1317.18-100-T	3-Fluorochrysene	[36288-22-9]	100µg/mL	toluene
2872.19-50-IO	9-Fluoro-5-methylchrysene	[64977-46-8]	50µg/mL	isooctane
1322.20-10-T	9-Fluorobenzo[k]fluoranthene	[113600-15-0]	10µg/mL	toluene
1322.20-100-T	9-Fluorobenzo[k]fluoranthene	[113600-15-0]	100µg/mL	toluene

Single components deuterated PAHs (neat or 1, 5 or 10x1mL for solutions)

0978.10-K-IO	Naphthalene-d_8	[1146-65-2]	1000µg/mL	isooctane
0978.10-K-T	Naphthalene-d_8	[1146-65-2]	1000µg/mL	toluene
0978.10-10MG	Naphthalene-d_8	[1146-65-2]	neat	10mg
0387.11-K-IO	1-Methylnaphthalene-d_{10}	[38072-94-5]	1000µg/mL	isooctane
1345.11-K-IO	2-Methylnaphthalene-d_{10}	[7297-45-2]	1000µg/mL	isooctane
0388.12-K-IO	1,8-Dimethylnaphthalene-d_{12}	[104489-29-4]	1000µg/mL	isooctane
1344.12-K-IO	2,6-Dimethylnaphthalene-d_{12}	[350820-12-1]	1000µg/mL	isooctane
1336.12-K-T	Acenaphthylene-d_8	[93951-97-4]	1000µg/mL	toluene
1336.12-10MG	Acenaphthylene-d_8	[93951-97-4]	neat	10 mg
1524.12-100-T	Acenaphthene-d_{10}	[15067-26-2]	100µg/mL	toluene
1524.12-K-T	Acenaphthene-d_{10}	[15067-26-2]	1000µg/mL	toluene
1524.12-10MG	Acenaphthene-d_{10}	[15067-26-2]	neat	10mg
1530.13-K-IO	Fluorene-d_{10}	[81103-79-9]	1000µg/mL	isooctane
1530.13-10MG	Fluorene-d_{10}	[81103-79-9]	neat	10mg
0389.14-K-T	Phenanthrene-d_{10}	[1517-22-2]	1000µg/mL	toluene
0389.14-10MG	Phenanthrene-d_{10}	[1517-22-2]	neat	10mg
0390.14-K-T	Anthracene-d_{10}	[1719-06-8]	1000µg/mL	toluene
0391.15-K-IO	9-Methylanthracene-d_{12}	[6406-97-9]	1000µg/mL	isooctane
0390.14-10MG	Anthracene-d_{10}	[1719-06-8]	neat	10mg
1337.16-K-T	Fluoranthene-d_{10}	[93951-69-0]	1000µg/mL	toluene
1337.16-10MG	Fluoranthene-d_{10}	[93951-69-0]	neat	10mg
0329.16-100-T	Pyrene-d_{10}	[1718-52-1]	100µg/mL	toluene
0329.16-200-T	Pyrene-d_{10}	[1718-52-1]	200µg/mL	toluene
0329.16-K-T	Pyrene-d_{10}	[1718-52-1]	1000µg/mL	toluene
0329.16-10MG	Pyrene-d_{10}	[1718-52-1]	neat	10mg
0326.17-10MG	1-Methylpyrene-d_9	[210487-07-3]	neat	10mg
0326.17-100-T	1-Methylpyrene-d_9	[210487-07-3]	100µg/mL	toluene
1024.18-100-T	Chrysene-d_{12}	[1719-03-5]	100µg/mL	toluene
1024.18-200-T	Chrysene-d_{12}	[1719-03-5]	200µg/mL	toluene
1024.18-K-T	Chrysene-d_{12}	[1719-03-5]	1000µg/mL	toluene
1024.18-2K-T	Chrysene-d_{12}	[1719-03-5]	2000µg/mL	toluene
1024.18-10MG	Chrysene-d_{12}	[1719-03-5]	neat	10mg
1087.18-100-T	Benz[a]anthracene-d_{12}	[1718-53-2]	100µg/mL	toluene
1087.18-K-T	Benz[a]anthracene-d_{12}	[1718-53-2]	1000µg/mL	toluene
1087.18-10MG	Benz[a]anthracene-d_{12}	[1718-53-2]	neat	10mg
1538.18-K-T	Triphenylene-d_{12}	[17777-56-9]	1000µg/mL	toluene
1538.18-K-T	Triphenylene-d_{12}	[17777-56-9]	1000µg/mL	toluene
1088.20-100-T	Benzo[a]pyrene-d_{12}	[63466-71-7]	100µg/mL	toluene
1088.20-K-T	Benzo[a]pyrene-d_{12}	[63466-71-7]	1000µg/mL	toluene
1088.20-10MG	Benzo[a]pyrene-d_{12}	[63466-71-7]	neat	10mg
1525.20-100-T	Benzo[e]pyrene-d_{12}	[205440-82-0]	100µg/mL	toluene
1348.20-100-T	Benzo[b]fluoranthene-d_{12}	[93951-98-5]	100µg/mL	toluene
1348.20-10MG	Benzo[b]fluoranthene-d_{12}	[93951-98-5]	neat	10mg
1349.20-100-T	Benzo[k]fluoranthene-d_{12}	[93952-01-3]	100µg/mL	toluene
1349.20-10MG	Benzo[k]fluoranthene-d_{12}	[93952-01-3]	neat	10mg
1534.20-K-T	Perylene-d_{12}	[1520-96-3]	1000µg/mL	toluene
1534.20-10MG	Perylene-d_{12}	[1520-96-3]	neat	neat

1089.22-100-T	Benzo[ghi]perylene-d_{12}	[93951-66-7]	100μg/mL	toluene
1089.22-200-T	Benzo[ghi]perylene-d_{12}	[93951-66-7]	200μg/mL	toluene
1089.22-K-T	Benzo[ghi]perylene-d_{12}	[93951-66-7]	1000μg/mL	toluene
1089.22-10MG	Benzo[ghi]perylene-d_{12}	[93951-66-7]	neat	10mg
1531.22-K-T	Indeno[1,2,3-cd]pyrene-d_{12}	[2053578-33-0]	1000μg/mL	toluene
1531.22-10MG	Indeno[1,2,3-cd]pyrene-d_{12}	[2053578-33-0]	neat	10mg
1330.22-100-IO	Dibenz[a,h]anthracene-d_{14}	[13250-98-1]	100μg/mL	isooctane
1330.22-100-T	Dibenz[a,h]anthracene-d_{14}	[13250-98-1]	100μg/mL	toluene
1330.22-200-T	Dibenz[a,h]anthracene-d_{14}	[13250-98-1]	200μg/mL	toluene
1330.22-10MG	Dibenz[a,h]anthracene-d_{14}	[13250-98-1]	neat	10mg
1526.24-100-T	Coronene-d_{12}	[16083-32-2]	100μg/mL	toluene
1526.24-K-T	Coronene-d_{12}	[16083-32-2]	1000μg/mL	toluene
1529.24-100-T	Dibenzo[a,i]pyrene-d_{14}	[158776-07-9]	100μg/mL	toluene
1529.24-K-T	Dibenzo[a,i]pyrene-d_{14}	[158776-07-9]	1000μg/mL	toluene
1529.24-10MG	Dibenzo[a,i]pyrene-d_{14}	[158776-07-9]	neat	10mg
1086.12-K-T	Biphenyl-d_{10}	[1486-01-7]	1000μg/mL	toluene
1086.12-10MG	Biphenyl-d_{10}	[1486-01-7]	neat	10mg

Internal unlabelled standards for GC- and HPLC-analysis of PAH compounds

Concentration: Neat or 1000 μg/mL, 1, 5, 10x1 mL

0393.12	n-Hexylbenzene	[1077-16-3]	in isooctane or 100mg neat (GC)
0728.12	2,3-Dimethylnaphthalene	[581-40-8]	in isooctane or 100mg neat (GC)
0768.16	3,6-Dimethylphenanthrene	[1576-67-6]	in isooctane or 10mg neat (GC)
0254.20	2,2´-Binaphthyl	[612-78-2]	in toluene or 10mg neat (GC)
1049.14	Anthracene	[120-12-7]	in toluene or 100mg neat (GC)
0306.21	6-Methylbenzo[a]pyrene	[2381-39-7]	in toluene or 10mg neat (HPLC)

Recommended internal standards

Recommended internal standards for GC-MS analysis.
The analytes are given in normal and the internal standards in bold letters.

		MW
Window 1:		
0711.10	Naphthalene	128
	Methylnaphthalene isomers	142
1313.10	**1-Fluoronaphthalene**	**146**
0978.10	**Naphthalene-d8**	**136**
Window 2:		
Biphenyl		154
0729.12	2,6-Dimethylnaphthalene	156
0002.12	Acenaphthylene	152
0732.12	Acenaphthene	154
1314.12	**5-Fluoroacenaphthylene**	**170**
1712.12	**4-Fluorobiphenyl**	**172**
1086.12	**Biphenyl-d_{10}**	**164**
Window 3:		
0217.13	Fluorene	166
0816.14	Phenanthrene	178
1049.14	Anthracene	178
1316.14	**3-Fluorophenanthrene**	**196**
0389.14	**Phenanthrene-d_{10}**	**188**
Window 4:		
	Methylphenanthrene isomers	192
	Dimethylphenanthrene isomers	206
0029.22	Pentaphene	278
0235.16	Pyrene	202
0260.16	Fluoranthene	202
	Methylfluoranthene isomers	216
	Methylpyrene isomers	216
0035.18	Cyclopenta[cd]pyrene	226
0261.18	Benzo[ghi]fluoranthene	226
0027.18	Benzo[c]phenanthrene	228
0201.18	Benz[a]anthracene	228
0001.18	Triphenylene	228
0212.18	Chrysene	228
1319.16	**3-Fluoroflouranthene**	**220**
1318.16	**1-Fluoropyrene**	**220**
1317.18	**3-Fluorochrysene**	**246**
0329.16	**Pyrene-d_{10}**	**212**
1087.18	**Benz[a]anthracene-d_{12}**	**240**
Window 5:		
0263.20	Benzo[b]fluoranthene	252
0264.20	Benzo[j]fluoranthene	252
0265.20	Benzo[k]fluoranthene	252
0262.20	Benzo[a]fluoranthene	252
0236.20	Benzo[e]pyrene	252
0239.20	Benzo[a]pyrene	252
0220.20	Perylene	264
1322.20	**9-Fluorobenzo[k]fluoranthene**	**270**
1088.20	**Benzo[a]pyrene-d_{12}**	**264**
Window 6:		
0204.22	Dibenz[a,j]anthracene	278
0203.22	Dibenz[a,h]anthracene	278
0202.22	Dibenz[a,c]anthracene	278
	Benzochrysenes	278
0215.22	Picene	278
0277.22	Indeno[1,2,3-cd]pyrene	278
0222.22	Benzo[ghi]perylene	276
1089.20	**Benzo[ghi]perylene-d_{12}**	**288**

Recommended "all-in-one" F-PAHs® cocktails for GC-MS applications

S-4102-200-T

F-PAHs All in One Cocktail 1, Window 1-4
5 Analytes, each 200 μg/mL in toluene; units: 1x1 mL, 5x1 mL

Compounds		Window	
1313.10	1-Fluoronaphthalene	1	[321-38-0]
1712.12	4-Fluorobiphenyl	2	[324-74-3]
1316.14	3-Fluorophenanthrene	3	[440-40-4]
1318.16	1-Fluoropyrene	4	[1691-65-2]
1317.18	3-Fluorochrysene	4	[36288-22-9]

S-4103-ASS-T

F-PAHs All in One Cocktail 2, Window 1-5

6 Analytes, each consentration as listed in toluene; units: 1x1 mL, 5x1 mL

Compounds		Window		
1313.10	1-Fluoronaphthalene	1	[321-38-0]	200 µg/mL
1712.12	4-Fluorobiphenyl	2	[324-74-3]	200 µg/mL
1316.14	3-Fluorophenanthrene	3	[440-40-4]	200 µg/mL
1318.16	1-Fluoropyrene	4	[1691-65-2]	200 µg/mL
1317.18	3-Fluorochrysene	4	[36288-22-9]	200 µg/mL
1322.20	9-Fluorobenzo[k]fluoranthene	5	[113600-15-0]	100 µg/mL

Recommended internal standards mixtures for GC-FID applications

S-4006-500-5DC

Internal Standard for GC-analysis of PAH compounds

4 Analytes, each 500 µg/mL in dichloromethane; unit:1x5 mL

0393.12	1-Phenylhexane	[1077-16-3]
0728.12	2,3-Dimethylnaphthalene	[581-40-8]
0768.16	3,6-Dimethylphenanthrene	[1576-67-6]
0254.20	2,2´-Binaphthyl	[612-78-2]

"All-in-one" deuterated PAHs® cocktails for GC-MS

Window 1-6:
S-4124-200-T
S-4124-500-5T

Perdeuterated Internal Standard - PAH-Mixture 6

7 Analytes, each 200 µg /mL in toluene; units: 1x1 mL, 1x5 mL

Compounds		Window	
0978.10	Naphthalene-d_8	1	[1146-65-2]
1086.12	Biphenyl-d_{10}	2	[1486-01-7]
0389.14	Phenanthrene-d_{10}	3	[1517-22-2]
0329.16	Pyrene-d_{10}	4	[1718-52-1]
1087.18	Benz[a]anthracene-d_{12}	5	[1718-53-2]
1088.20	Benzo[a]pyrene-d_{10}	5	[63466-71-7]
1089.22	Benzo[ghi]perylene-d_{12}	6	[93951-66-7]

Window 1-3+5
S-4048-2K-T
S-4048-2K-5T

Perdeuterated Internal Standard - PAH-Mixture 1

4 Analytes, each 2000 µg/mL in toluene; units:1x1 mL, 1x5 mL

Compounds		Window	
0978.10	Naphthalene-d_8	1	[1146-65-2]
1086.12	Biphenyl-d_{10}	2	[1486-01-7]
0389.14	Phenanthrene-d_{10}	3	[1517-22-2]
1088.20	Benzo[a]pyrene-d_{10}	5	[63466-71-7]

Window 1-3+5
S-4125-200-T
S-4125-200-5T

Perdeuterated Internal Standard - PAH-Mixture 7
4 Analytes, each 2000 µg/mL in toluene; units:1x1 mL, 1x5 mL

Compounds		Window	
0978.10	Naphthalene-d_8	1	[1146-65-2]
1086.12	Biphenyl-d_{10}	2	[1486-01-7]
0389.14	Phenanthrene-d_{10}	3	[1517-22-2]
1088.20	Benzo[a]pyrene-d_{10}	5	[63466-71-7]

Window 1-5:
S-4126-200-T
S-4126-200-5T

Perdeuterated Internal Standard - PAH-Mixture 8
5 Analytes, each 2000 µg/mL in toluene; units:1x1 mL, 1x5 mL

Compounds		Window	
0978.10	Naphthalene-d_8	1	[1146-65-2]
1086.12	Biphenyl-d_{10}	2	[1486-01-7]
0389.14	Phenanthrene-d_{10}	3	[1517-22-2]
0329.16	Pyrene-d_{10}	4	[1718-52-1]
1088.20	Benzo[a]pyrene-d_{10}	5	[63466-71-7]

See also page 142 for other deuterated PAH-mixes.

NEW

16 EPA and 15 EU "all-in-one" deuterated standards

S-4513-100-5T **Perdeuterated Internal standard - All-in-one 16 EPA priority PAHs**

S-4514-100-5T **Perdeuterated Internal standard - All-in-one 15 EU priority PAHs**

Native single PAH-standards, metabolites and derivatives

See the Compounds section, page 295 and onward.

International methods

Priority PAH's recommended by various authorities

Chiron No.		EPA***	WHO/	EAA	NS 9815 EEC*	Italy**	MW
0711.10	Naphthalene	x					128
0002.12	Acenaphtylene	x					152
0732.12	Acenaphthene	x					154
0217.13	Fluorene	x					166
0816.14	Phenanthrene	x		x	X		178
1049.14	Anthracene	x		x	X		178
0260.16	Fluoranthene	x	x	x	X		202
0235.16	Pyrene	x		x	X		202
0259.17	Benzo[a]fluorene			x	x		216
0218.17	Benzo[b]fluorene			x	x		216
0201.18	Benz[a]anthracene	x		x	x	x	228
0212.18	Chrysene	x		x	x		228
0001.18	Triphenylene			x			228
0263.20	Benzo[b]fluoranthene	x	x	x	x	x	252
0264.20	Benzo[j]fluoranthene					x	252
0265.20	Benzo[k]fluoranthene	x	x	x	x	x	252
0239.20	Benzo[a]pyrene	x	x	x	x	x	252
0236.20	Benzo[e]pyrene			x	x		252
0203.22	Dibenz[a,h]anthracene	x		x	x	x	278
0222.22	Benzo[ghi]perylene	x	x	x	x		276
0277.22	Indeno[1,2,3-cd]pyrene	x	x	x	x		276
0244.24	Dibenzo[a,e]pyrene			x	x	x	302
0242.24	Dibenzo[a,h]pyrene			x			302
0241.24	Dibenzo[a,i]pyrene			x			302
	Chiron No.:	**S-4063-4065**	**S-4062**	**S-4113**	**S-4008**	**Request**	

EPA	The US Environmental Protection Agency Method 610 etc.
WHO	World Health Organisation
EEC	European Economic Community
EAA	European Aluminium Association
NS	Norwegian Standard
Italy	Italian National Advisory Toxicological Com. for Health Related Studies

*	Drinking water
**	Air
***	EPA-Methods:

International PAH-methods:

ASTM D 5186-03	SFC-method
ASTM D 5580-02	Gasoline
ASTM D 5739-06	Oil spill
ASTM D 5769-04	Aromatics in gasoline
ASTM D 6370-04	Aviation fuels
ASTM D 6591-06	Middle distillates
ISO 7981.1:2005	Water quality – six PAHs by tlc
ISO 7981.2:2005	Water quality – sixPAHs by HPLC
ISO 15753:2006	PAH in Animal and vegetable fats and oils

ISO 17993:2002	Water quality – 15 PAHs by HPLC
EPA 525.2	Water – Organics and PAHs by GC
EPA 527	Drinking water – pesticides and PBDEs by GC/MS
EPA 610	PAH in wastewater by HPLC and GC
EPA 8100	PAHs in water by GC-FID
EPA 8260	Volatile Compounds by GC-MS
EPA 8270C	Semivolatile Compounds by GC-MS
EPA 8310	Polycyclic Aromatic Hydrocarbons in Ground water and wastes

Reference PAH cocktails according to international methods

EPA-PAHs

Single components EPA-PAHs

Pack sizes for solutions: 1x1mL, 5x1mL, 10x1mL, and neat compound.

0711.10	Naphthalene	(99%)	[91-20-3]	1000 µg/mL	10mg
0002.12	Acenaphthylene	(99%)	[208-96-8]	1000 µg/mL	10mg
0732.12	Acenaphthene	(99%)	[83-32-9]	1000 µg/mL	10mg
0217.13	Fluorene	(99%)	[86-73-7]	1000 µg/mL	10mg
0816.14	Phenanthrene	(99%)	[85-01-8]	1000 µg/mL	10mg
1049.14	Anthracene	(99%)	[120-12-7]	1000 µg/mL	10mg
0260.16	Fluoranthene	(99%)	[206-44-0]	200 µg/mL*	10mg
0235.16	Pyrene	(99%)	[129-00-0]	200 µg/mL*	10mg
0201.18	Benz[a]anthracene	(99%)	[56-55-3]	200 µg/mL*	10mg
0212.18	Chrysene	(99%)	[218-01-9]	200 µg/mL*	10mg
0263.20	Benzo[b]fluoranthene	(99%)	[205-99-2]	200 µg/mL*	10mg
0265.20	Benzo[k]fluoranthene	(99%)	[207-08-9]	200 µg/mL*	10mg
0239.20	Benzo[a]pyrene	(99%)	[50-32-8]	200 µg/mL*	10mg
0203.22	Dibenz[a,h]anthracene	(99%)	[215-58-7]	200 µg/mL*	10mg
0222.22	Benzo[ghi]perylene	(99%)	[191-24-2]	200 µg/mL*	10mg
0277.22	Indeno[1,2,3-cd]pyrene	(99%)	[193-39-5]	200 µg/mL*	10mg

1708.16 Single EPA-PAH Kit Solutions

1959.16 Single EPA-PAH Kit Neat, 10 mg each

* Also available as 1000 µg/mL

The universal “all-in-one” 16 EPA-PAH solutions from Chiron

Designed for calibration of GC/GC-MS and HPLC applications according to EPA metods 550.1/610/8100/8270C/8310
For other blends see page 136.
Please inquire for custom blends

EPA methods 550.1/610/8100/8270C/8310:

S-4063-100-5T **16 Priority PAH, Cocktail 1**
100 µg of each/mL in toluene, 5 mL in screw cap bottle

S-4064-10-5CY **16 Priority PAH, Cocktail 2**
10 µg of each/mL in cyclohexane, 5 mL in screw cap bottle

S-4065-10-5AN **16 Priority PAH, Cocktail 3**
10 µg of each/mL in acetonitrile, 5 mL in screw cap bottle

15 EU PAHs (2005/108 recommendation)

NEW

0201,18-200-T	Benz[a]anthracene	[56-55-3]	200µg/mL
0212,18-200-T	Chrysene	[218-01-9]	200µg/mL
0263,20-200-T	Benzo[b]fluoranthene	[205-99-2]	200µg/mL
0264,20-200-T	Benzo[j]fluoranthene	[205-82-3]	200µg/mL
0265,20-200-T	Benzo[k]fluoranthene	[207-08-9]	200µg/mL
0239,20-200-T	Benzo[a]pyrene	[50-32-8]	200µg/mL
0035,18-200-T	Cyclopenta[cd]pyrene	[27208-37-3]	200µg/mL
0203,22-200-T	Dibenzo[a,h]anthracene	[215-58-7]	200µg/mL
0222,22-200-T	Benzo[ghi]perylene	[191-24-2]	200µg/mL
0244,24-200-T	Dibenzo[a,e]pyrene	[192-65-4]	200µg/mL
0242,24-200-T	Dibenzo[a,h]pyrene	[189-64-0]	200µg/mL
0241,24-200-T	Dibenzo[a,i]pyrene	[189-55-9]	200µg/mL
0243,24-200-T	Dibenzo[a,l]pyrene	[191-30-0]	200µg/mL
0277,22-200-T	Indeno[1,2,3-cd]pyrene	[193-39-5]	200µg/mL
0296,19-200-T	5-Methylchrysene	[3697-24-3]	200µg/mL

3958.15 -KIT Single 15 EU PAH Kit

The universal “all-in-one” 15 EU-PAH solutions from Chiron

S-4452-100-T **15 EU PAH Cocktail**
15 Analytes, 100µg/mL each in toluene, 1x1mL ampolle or 1x5mL screw cap bottle.

WHO/EU PAH in drinking water (=ISO 7981.1 and 2)

S-4062-ASS-5AN **6 Priority PAH in Acetonitrile - drinking water analysis (WHO/EU)**
6 Analytes, each concentration as listed in acetonitrile; units: 1x5mL

0260.16	Fluoranthene	[206-44-0]	10 µg/mL
0277.22	Indenopyrene	[193-39-5]	2 µg/mL
0263.20	Benzo[b]fluoranthene	[205-99-2]	2 µg/mL
0265.20	Benzo[k]fluoranthene	[207-08-9]	2 µg/mL
0239.20	Benzo[a]pyrene	[50-32-8]	2 µg/mL
0222.20	Benzo[ghi]perylene	[191-24-2]	2 µg/mL

Other PAH mixes

Native

S-4001-K-T **PAH-Mixture A**
13 Analytes, each 1000 µg/mL in toluene; units: 1x1 mL

1220.15	Bisphenol A	[80-05-7]
0712.11	1-Methylnaphthalene	[90-12-0]
0713.11	2-Methylnaphthalene	[91-57-6]
0884.12	Dibenzothiophene	[132-65-0]
0812.15	2-Methylphenanthrene	[2531-84-2]
0768.16	3,6-Dimethylphenanthrene	[1576-67-6]
0259.17	11H-Benzo[a]fluorene	[238-84-6]
0304.17	1-Methylpyrene	[2381-21-7]
0001.18	Triphenylene	[217-59-4]
0236.20	Benzo[e]pyrene	[192-97-2]
0220.20	Perylene	[198-55-0]
0706.13	2,3,5-Trimethylnaphthalene	[2245-38-7]
0729.12	2,6-Dimethylnaphthalene	[581-42-0]

S-4410-10-T **PAH Mixture D**
7 Analytes, each 10 µg/mL in toluene; unit: 1x1.1 mL

Prod.no.	Compound	CAS No.
0201,18	Benz[a]anthracene	[56-55-3]
0263,20	Benzo[b]fluoranthene	[205-99-2]
0264,20	Benzo[j]fluoranthene	[205-82-3]
0265,20	Benzo[k]fluroanthene	[207-08-9]
0277,22	Indeno[1,2,3-cd]pyrene	[193-39-5]
0203,22	Dibenz[a,h]anthracene	[53-70-3]
0239,20	Benzo[a]pyrene	[50-32-8]

S-4413-ASS-T

PAH Mixture E

25 Analytes, each concentration as listed in toluene; unit: 1x1 mL

Prod.no.	Compound	CAS No.	Conc.
0711,10	Naphthalene	[91-20-3]	50 µg/mL
0002,12	Acenaphthylene	[208-96-8]	200 µg/mL
0732,12	Acenaphthene	[83-32-9]	200 µg/mL
0217,13	Fluorene	[86-73-7]	200 µg/mL
0816,14	Phenanthrene	[85-01-8]	500 µg/mL
1049,14	Anthracene	[120-12-7]	500 µg/mL
0260,16	Fluoranthene	[206-44-0]	500 µg/mL
0235,16	Pyrene	[129-00-0]	500 µg/mL
0201,18	Benz[a]anthracene	[56-55-3]	500 µg/mL
0212,18	Chrysene	[218-01-9]	500 µg/mL
0263,20	Benzo[b]fluoranthene	[205-99-2]	500 µg/mL
0265,20	Benzo[k]fluoranthene	[207-08-9]	500 µg/mL
0239,20	Benzo[a]pyrene	[50-32-8]	500 µg/mL
0277,22	Indeno[1,2,3-cd]pyrene	[193-39-5]	500 µg/mL
0203,22	Dibenz[a,h]anthracene	[53-70-3]	500 µg/mL
0222,22	Benzo[ghi]perylene	[191-24-2]	500 µg/mL
0264,20	Benzo[j]fluoranthene	[205-82-3]	500 µg/mL
0256,22	Anthanthrene	[191-26-4]	500 µg/mL
0485,16	Benzo[b]naphtho[2,1-d]thiophene	[239-35-0]	500 µg/mL
0027,18	Benzo[c]phenanthrene	[195-19-7]	500 µg/mL
0035,18	Cyclopenta[cd]pyrene	[27208-37-3]	500 µg/mL
0241,24	Dibenzo[a,l]pyrene	[189-55-9]	500 µg/mL
0036,20	Cholanthrene	[479-23-2]	500 µg/mL
0236,20	Benzo[e]pyrene	[192-97-2]	500 µg/mL
0226,24	Coronene	[191-07-1]	500 µg/mL

S-4442-200-T

PAH Mixture G

7 Analytes, each 200µg/mL in toluene; unit: 1x1.1 mL

Prod.no.	Compound	CAS.No.
0485.16	Benzo[b]naphtho[2,1-d]thiophene	[239-35-0]
0027.18	Benzo[c]phenanthrene	[195-19-7]
0035.18	Cyclopenta[cd]pyrene	[27208-37-3]
0036.20	Cholanthrene	[479-23-2]
0236.20	Benzo[e]pyrene	[192-97-2]
0256.22	Anthanthrene	[191-26-4]
0241.24	Dibenzo[a,i]pyrene	[189-55-9]

S-4443-100-T
S-4443-100-5T

PAH Mixture H

5 Analytes, each 100µg/mL in toluene; units: 1x1 mL, 1x5 mL

Prod.no.	Compound	CAS.No.
0259.17	11H-Benzo[a]fluorene	[238-84-6]
0218.17	11H-Benzo[b]fluorene	[243-17-4]
0244.24	Dibenzo[a,e]pyrene	[192-65-4]
0242.24	Dibenzo[a,h]pyrene	[189-64-0]
0241.24	Dibenzo[a,i]pyrene	[189-55-9]

S-4445-200-T

PAH Mixture I

7 Analytes, each 200μg/mL in toluene; units: 1x1.1mL

Prod.no.	Compound	CAS.No.
0711.10	Naphthalene	[91-20-3]
0712.11	1-Methylnaphthalene	[90-12-0]
0713.11	2-Methylnaphthalene	[91-57-6]
0816.14	Phenanthrene	[85-01-8]
0260.16	Fluroanthene	[206-44-0]
0235.16	Pyrene	[129-00-0]
0239.20	Benzo[a]pyrene	[50-32-8]

Alkyl-PAH

S-4087-40-CY

Methyl-PAH Mixture 1

7 Analytes, each 40 μg/mL in cyclohexane; unit: 1x1 mL

0005.21	3-Methylcholanthrene	[56-49-5]
0296.19	5-Methylchrysene	[3697-24-3]
0100.20	3,9-Dimethylbenz[a]anthracene	[316-51-8]
0301.20	7,12-Dimethylbenz[a]anthracene	[57-97-6]
0725.12	1,6-Dimethylnaphthalene	[575-43-9]
0876.16	1,3-Dimethylphenanthrene	[16664-45-2]
1038.18	4,5-Dimethylpyrene	[15679-25-1]

S-4086-500-IO

Trimethylnaphthalene Mixture 1

6 Analytes, each 500 μg/mL in isooctane; unit: 1x1 mL

0700.13	1,2,3-Trimethylnaphthalene	[879-12-9]
0701.13	1,2,4-Trimethylnaphthalene	[2717-42-2]
0704.13	1,4,5-Trimethylnaphthalene	[2131-41-1]
0705.13	1,4,6-Trimethylnaphthalene	[2131-42-2]
0706.13	2,3,5-Trimethylnaphthalene	[2245-38-7]
0441.13	2,3,6-Trimethylnaphthalene	[829-26-5]

Deuterated

S-4047-60-T

S-4047-60-5T

Deuterated Anthracene in Toluene

1 Analyte, 60 μg/mL in toluene; units: 1x1 mL, 1x5 mL

0390.14	Anthracene-d_{10}	[1719-06-8]

S-4076-K-T

S-4076-K-5T

Deuterated Surrogate Standard

5 Analytes, 1000 μg/mL in toluene; units: 1x1 mL, 1x5 mL

0978.10	Naphthalene-d_8	[1146-65-2]
1086.12	Biphenyl-d_{10}	[1486-01-7]
0389.14	Phenanthrene-d_{10}	[1517-22-2]
1088.20	Benzo[a]pyrene-d_{12}	[63466-71-7]
1089.22	Benzo[ghi]perylene-d_{12}	[93951-66-7]

S-4080-100-T
S-4080-100-5T

Perdeuterated Internal Standard - PAH-Mixture 2

5 Analytes, 100 µg/mL in toluene; units: 1x1 mL, 1x5 mL

0978.10	Naphthalene-d_8	[1146-65-2]
1086.12	Biphenyl-d_{10}	[1486-01-7]
0389.14	Phenanthrene-d_{10}	[1517-22-2]
1088.20	Benzo[a]pyrene-d_{10}	[63466-71-7]
1330.22	Dibenz[a,h]anthracene-d_{14}	[13250-98-1]

S-4081-K-CY
S-4081-K-5CY

Perdeuterated Internal Standard - PAH-Mixture 3

9 Analytes, each 1000 µg/mL in cyclohexane; units: 1x1 mL, 1x5 mL

0978.10	Naphthalene-d_8	[1146-65-2]
1336.12	Acenaphthylene-d_8	[93951-97-4]
0383.12	Dibenzothiophene-d_8	[33262-29-2]
0389.14	Phenanthrene-d_{10}	[1517-22-2]
0329.16	Pyrene-d_{10}	[1718-52-1]
1337.16	Fluoranthene-d_{10}	[93951-69-0]
1024.18	Chrysene-d_{12}	[1719-03-5]
1088.20	Benzo[a]pyrene-d_{12}	[63466-71-7]
1330.22	Dibenz[a,h]anthracene-d_{14}	[13250-98-1]

S-4084-K-BD
S-4084-K-5BD

Perdeuterated Internal Standard PAH-Mixture 4

5 Analytes, each1000 µg/mL in benzene-d6; units: 1x1 mL, 1x5 mL

1337.16	Fluoranthene-d_{10}	[93951-69-0]
1348.20	Benzo[b]fluoranthene-d_{12}	[93951-98-5]
1349.20	Benzo[k]fluoranthene-d_{12}	[93952-01-3]
1089.20	Benzo[ghi]perylene-d_{12}	[93951-66-7]
1088.20	Benzo[a]pyrene-d_{12}	[63466-71-7]

S-4405-100-BD

Perdeuterated Internal Standard – PAH Mixture 11

16 Analytes, each 100 µg/mL in benzene-d6; unit: 1x1.1mL

Prod. No.	Compound	CAS No.
1524,12	Acenaphthene-d_{10}	[15067-26-2]
1336,12	Acenaphthylene-d_8	[93951-97-4]
0390,14	Anthracene-d_{10}	[1719-06-8]
1087,18	Benz[a]anthracene-d_{12}	[1718-53-2]
1348,20	Benzo[b]fluoranthene-d_{12}	[93951-98-5]
1349,20	Benzo[k]fluoranthene-d_{12}	[93952-01-3]
1089,22	Benzo[g,h,i]perylene-d_{12}	[93951-66-7]
1088,20	Benzo[a]pyrene-d_{12}	[63466-71-7]
1024,18	Chrysene-d_{12}	[1719-03-5]
1330,22	Dibenz[a,h]anthracene-d_{14}	[13250-98-1]
1337,16	Fluoranthene-d_{10}	[93951-69-0]
1530,13	Fluorene-d_{10}	[81103-79-9]
1531,22	Indeno[1,2,3-cd]pyrene-d_{12}	[203578-33-0]
0978,10	Naphthalene-d_8	[1146-65-2]
0389,14	Phenanthrene-d_{10}	[1517-22-2]
0329,16	Pyrene-d_{10}	[1718-52-1]

See also deuterated PAH mixtures 1, 6, 7 and 8, pages 134-135.

S-4034-ASS-IO

NPD Cocktail 1

20 Analytes, each concentration as listed in isooctane; unit: 1x1 mL

0712.11	1-Methylnaphthalene	[90-12-0]	500 µg/mL
0713.11	2-Methylnaphthalene	[91-57-6]	500 µg/mL
0722.12	1,3-Dimethylnaphthalene	[575-41-7]	500 µg/mL
0723.12	1,4-Dimethylnaphthalene	[571-58-4]	500 µg/mL
0724.12	1,5-Dimethylnaphthalene	[571-61-9]	500 µg/mL
0725.12	1,6-Dimethylnaphthalene	[575-43-9]	500 µg/mL
0726.12	1,7-Dimethylnaphthalene	[575-37-1]	500 µg/mL
0729.12	2,6-Dimethylnaphthalene	[581-42-0]	500 µg/mL
0731.12	2,7-Dimethylnaphthalene	[582-16-1]	500 µg/mL
0341.12	Biphenyl	[92-52-4]	500 µg/mL
0816.14	Phenanthrene	[85-01-8]	500 µg/mL
0811.15	1-Methylphenanthrene	[832-69-9]	250 µg/mL
0812.15	2-Methylphenanthrene	[2531-84-2]	250 µg/mL
0813.15	3-Methylphenanthrene	[832-71-3]	250 µg/mL
0815.15	9-Methylphenanthrene	[883-20-5]	250 µg/mL
0884.12	Dibenzothiophene	[132-65-0]	250 µg/mL
2501.13	1-Methyldibenzothiophene	[31317-07-4]	100 µg/mL
0886.13	2-Methyldibenzothiophene	[20928-02-3]	100 µg/mL
2499.13	3-Methyldibenzothiophene	[16587-52-3]	100 µg/mL
0887.13	4-Methyldibenzothiophene	[7372-88-5]	100 µg/mL

S-4083-K-T

NPD Cocktail 2

25 Analytes, each 1000 µg/mL in toluene; unit: 1x1 mL

0711.10	Naphthalene	[91-20-3]
0887.13	4-Methyldibenzothiophene	[7372-88-5]
0713.11	2-Methylnaphthalene	[91-57-6]
0148.14	4-Ethyldibenzothiophene	[89816-99-9]
0729.12	2,6-Dimethylnaphthalene	[581-42-0]
0149.15	4-Propyldibenzothiophene	[132034-86-7]
0716.13	2-Isopropylnaphthalene	[2027-17-0]
0260.16	Fluoranthene	[206-44-0]
0002.12	Acenaphthylene	[208-96-8]
0235.16	Pyrene	[129-00-0]
0732.12	Acenaphthene	[83-32-9]
0201.18	Benz[a]anthracene	[56-55-3]
0217.13	Fluorene	[86-73-7]
0212.18	Chrysene	[218-01-9]
0816.14	Phenanthrene	[85-01-8]
0263.20	Benzo[b]fluoranthene	[205-99-2]
1049.14	Anthracene	[120-12-7]
0265.20	Benzo[k]fluoranthene	[207-08-9]
0815.15	9-Methylphenanthrene	[883-20-5]
0239.20	Benzo[a]pyrene	[50-32-8]
1028.16	9-Ethylphenanthrene	[3674-75-7]
0277.22	Indeno[1,2,3-cd]pyrene	[193-39-5]
0782.16	1,2,6-Trimethylphenanthrene	[30436-55-6]
0203.22	Dibenz[a,h]anthracene	[215-58-7]
0884.12	Dibenzothiophene	[132-65-0]
0222.22	Benzo[ghi]perylene	[191-24-2]

S-4046-200-IO

NPD Cocktail 3

14 Analytes, each 200 µg/mL in isooctane; unit: 1x1 mL

0884.12	Dibenzothiophene	[132-65-0]
0441.12	2,3,6-Trimethylnaphthalene	[829-26-5]
0887.13	4-Methyldibenzothiophene	[7372-88-5]
0260.16	Fluoranthene	[206-44-0]
0449.14	2,8-Dimethyldibenzothiophene	[1207-15-4]
0816.14	Phenanthrene	[85-01-8]
0158.14	2,4,7-Trimethyldibenzothiophene	[216983-03-8]
0812.15	2-Methylphenanthrene	[2531-84-2]
0711.10	Naphthalene	[91-20-3]
0762.16	1,6-Dimethylphenanthrene	[20291-74-1]
0713.10	2-Methylnaphthalene	[91-57-6]
0783.17	1,2,8-Trimethylphenanthrene	[20291-75-2]
0728.12	2,3-Dimethylnaphthalene	[581-40-8]
0235.16	Pyrene	[129-00-0]

S-4104-200-IO

NPD Cocktail 4

14 Analytes, each 200 µg/mL in isooctane; unit: 1x1 mL

0884.12	Dibenzothiophene	[132-65-0]
0441.12	2,3,6-Trimethylnaphthalene	[829-26-5]
0198.9	4-Methylbenzothiophene	[14316-11-8]
0260.16	Fluoranthene	[206-44-0]
0449.14	2,8-Dimethyldibenzothiophene	[1207-15-4]
0816.14	Phenanthrene	[85-01-8]
0158.14	2,4,7-Trimethyldibenzothiophene	[216983-03-8]
0812.15	2-Methylphenanthrene	[2531-84-2]
0711.10	Naphthalene	[91-20-30]
0762.16	1,6-Dimethylphenanthrene	[20291-74-1]
0713.11	2-Methylnaphthalene	[91-57-6]
0783.17	1,2,8-Trimethylphenanthrene	[20291-75-2]
0728.12	2,3-Dimethylnaphthalene	[581-40-8]
0235.16	Pyrene	[129-00-0]

S-4007-ASS-AC

PAH/NPD Stock Solution

21 Analytes, each consentration as listed in acetone; units: 1x1 mL, 5x1 mL

0711.10	Naphthalene	[91-20-3]	1.86 µg/mL
0713.11	2-Methylnaphthalene	[91-57-6]	3.36 µg/mL
0722.12	1,3-Dimethylnaphthalene	[575-41-7]	3.51 µg/mL
0716.13	2-Isopropylnaphthalene	[2027-17-0]	1.87 µg/mL
0002.12	Acenaphthylene	[208-96-8]	0.009 µg/mL
0732.12	Acenaphthene	[83-32-9]	0.014 µg/mL
0217.13	Fluorene	[86-73-7]	0.21 µg/mL
0816.14	Phenanthrene	[85-01-8]	0.19 µg/mL
0815.15	9-Methylphenanthrene	[883-20-5]	0.31 µg/mL
1028.16	9-Ethylphenanthrene	[3674-75-7]	0.27 µg/mL
0884.12	Dibenzothiophene	[132-65-0]	0.04 µg/mL
0887.13	4-Methyldibenzothiophene	[7372-88-5]	0.09 µg/mL
0148.14	4-Ethyldibenzothiophene	[89816-99-9]	0.08 µg/mL
0260.16	Fluoranthene	[206-44-0]	0.008 µg/mL
0235.16	Pyrene	[129-00-0]	0.07 µg/mL

0201.18	Benz[a]anthracene	[56-55-3]	0.009 µg/mL
0212.18	Chrysene	[218-01-9]	0.021 µg/mL
0296.19	5-Methylchrysene	[3697-24-3]	0.02 µg/mL
0263.20	Benzo[b]fluoranthene	[205-99-2]	0.003 µg/mL
0239.20	Benzo[a]pyrene	[50-32-8]	0.001 µg/mL
0222.22	Benzo[ghi]perylene	[191-24-2]	0.0008 µg/mL

S-4068-ASS-T **Calibration Standard PAH/NPD**

Available in the following concentrations or as a complete set of 7x250µL.
Concentration: each 200, 100, 80, 40, 20, 10 or 5 µg/mL in toluene

0711.10	Naphthalene	[91-20-3]
0393.12	1-Phenylhexane (n-Hexylbenzene)	[1077-16-3]
0712.11	1-Methylnaphthalene	[90-12-0]
0713.11	2-Methylnaphthalene	[91-57-6]
0728.12	2,3-Dimethylnaphthalene	[581-40-8]
0002.12	Acenaphthylene	[208-96-8]
1100.12	Dibenzofuran	[132-64-91]
0217.13	Fluorene	[86-73-7]
0816.14	Phenanthrene	[85-01-8]
1049.14	Anthracene	[120-12-7]
0769.16	3,6-Dimethylphenanthrene	[66291-32-5]
0260.16	Fluoranthene	[206-44-0]
0235.16	Pyrene	[129-00-0]
0259.17	11H-Benzo[a]fluorene	[238-84-6]
0218.17	11H-Benzo[b]fluorene	[243-17-4]
0212.18	Chrysene	[218-01-9]
0254.20	2,2'-Binaphthyl	[612-78-2]
0263.20	Benzo[b]fluoranthene	[205-99-2]
0265.20	Benzo[k]fluoranthene	[207-08-9]
0239.20	Benzo[a]pyrene	[50-32-8]
0236.20	Benzo[e]pyrene	[192-97-2]
0220.20	Perylene	[198-55-0]
0277.22	Indeno[1,2,3-cd]pyrene	[193-39-5]
0203.22	Dibenz[a,h]anthracene	[215-58-7]
0222.20	Benzo[ghi]perylene	[191-24-2]
0244.24	Dibenzo[a,e]pyrene	[192-65-4]
0242.24	Dibenzo[a,h]pyrene	[189-64-0]
0241.24	Dibenzo[a,i]pyrene	[189-55-9]
0256.24	Anthanthrene	[191-26-4]
0226.24	Coronene	[191-07-1]
0264.20	Benzo[j]fluoranthene	[205-82-3]
0201.18	Benz[a]anthracene	[56-55-3]
0732.12	Acenaphthene	[83-32-9]

S-4089-ASS-T **PAH/NPD Control Standard**

S-4089-ASS-5T

26 Analytes, each consentration as listed in toluene; units: 1x1 mL, 1x5 mL

0711.10	Naphthalene	[91-20-3]	500 µg/mL
0713.11	2-Methylnaphthalene	[91-57-6]	500 µg/mL
0729.12	2,6-Dimethylnaphthalene	[581-42-0]	500 µg/mL
0716.13	2-Isopropylnaphthalene	[2027-17-0]	300 µg/mL
0002.12	Acenaphthylene	[208-96-8]	100 µg/mL
0732.12	Acenaphthene	[83-32-9]	100 µg/mL
0217.13	Fluorene	[86-73-7]	100 µg/mL
0816.14	Phenanthrene	[85-01-8]	100 µg/mL
1049.14	Anthracene	[120-12-7]	100 µg/mL
0815.15	9-Methylphenanthrene	[883-20-5]	100 µg/mL
1028.16	9-Ethylphenanthrene	[3674-75-7]	100 µg/mL
0782.17	1,2,6-Trimethylphenanthrene	[30436-55-6]	100 µg/mL
0884.12	Dibenzothiophene	[132-65-0]	100 µg/mL
0887.13	4-Methyldibenzothiophene	[7372-88-5]	100 µg/mL
0148.14	4-Ethyldibenzothiophene	[89816-99-9]	100 µg/mL
0149.15	4-Propyldibenzothiophene	[132034-86-7]	100 µg/mL
0260.16	Fluoranthene	[206-44-0]	100 µg/mL
0235.16	Pyrene	[129-00-0]	100 µg/mL
0201.18	Benz[a]anthracene	[56-55-3]	100 µg/mL
0212.18	Chrysene	[218-01-9]	100 µg/mL
0263.20	Benzo[b]fluoranthene	[205-99-2]	100 µg/mL

0265.20	Benzo[k]fluoranthene	[207-08-9]	100 µg/mL
0239.20	Benzo[a]pyrene	[50-32-8]	100 µg/mL
0277.22	Indeno[1,2,3-cd]pyrene	[193-39-5]	100 µg/mL
0203.22	Dibenz[a,h]anthracene	[215-58-7]	100 µg/mL
0222.22	Benzo[ghi]perylene	[191-24-2]	100 µg/mL

S-4406-200-T
S-4406-200-2T

PAH/Dibenzothiophenes Mixture

20 Analytes, each 200 µg/mL in toluene; units: 1x1 mL, 1x2mL

Prod.no.	Compound	CAS No.
0712,11	1-Methylnaphthalene	[90-12-0]
0713,11	2-Methylnaphthalene	[91-57-6]
0725,12	1,6-Dimethylnaphthalene	[575-43-9]
0706,13	2,3,5-Trimethylnaphthalene	[2245-38-7]
0812,15	2-Methylphenanthrene	[2531-84-2]
0880,16	2,4-Dimethylphenanthrene	[15254-64-5]
0782,17	1,2,6-Trimethylphenanthrene	[30436-55-6]
0783,17	1,2,8-Trimethylphenanthrene	[20291-75-2]
0884,12	Dibenzothiophene	[132-65-0]
0886,13	2-Methyldibenzothiophene	[20928-02-3]
0449,14	2,8-Dimethyldibenzothiophene	[1207-15-4]
0158,15	2,4,7-Trimethyldibenzothiophene	[216983-03-8]
0236,20	Benzo[e]pyrene	[192-97-2]
0220,20	Perylene	[198-55-0]
0001,18	Triphenylene	[217-59-4]
0027,18	Benzo[c]phenanthrene	[195-19-7]
0264,20	Benxo[j]fluoranthene	[205-82-3]
0289,17	1-Methylfluoranthene	[25889-60-5]
0292,19	1-Methylchrysene	[3351-28-8]
1508,20	6-Ethylchrysene	[2732-58-3]

S-4416-100-AN

PAH/NPD Mixture

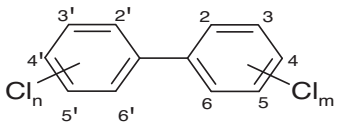
28 Analytes, each 100 µg/mL in acetonitrile; unit: 1x1.1 mL

Prod.no.	Compound	CAS No.
0002,12	Acenaphthylene	[208-96-8]
0732,12	Acenaphthene	[83-32-9]
0217,13	Fluorene	[86-73-7]
1049,14	Anthracene	[120-12-7]
0260,16	Fluoranthene	[206-44-0]
0235,16	Pyrene	[129-00-0]
0201,18	Benz[a]anthracene	[56-55-3]
0212,18	Chrysene	[218-01-9]
0263,20	Benzo[b]fluoranthene	[205-99-2]
0265,20	Benzo[k]fluoranthene	[207-08-9]
0239,20	Benzo[a]pyrene	[50-32-8]
0222,22	Benzo[ghi]perylene	[191-24-2]
0277,22	Indeno[1,2,3-cd]pyrene	[193-39-5]
0203,22	Dibenz[a,h]anthracene	[53-70-3]
0711,10	Naphthalene	[91-20-3]
0816,14	Phenanthrene	[85-01-8]
0884,12	Dibenzothiophene	[132-65-0]
0712,11	1-Methylnaphthalene	[90-12-0]

0713,11	2-Methylnaphthalene	[91-57-6]
0815,15	9-Methylphenanthrene	[883-20-5]
0887,13	4-Methyldibenzothiophene	[7372-88-5]
0729,12	2,6-Dimethylnaphthalene	[581-42-0]
1028,16	9-Ethylphenanthrene	[3674-75-7]
0148,14	4-Ethyldibenzothiophene	[89816-99-9]
0716,13	2-Isopropylnaphthalene	[2027-17-0]
0782,17	1,2,6-Trimethylphenanthrene	[30436-55-6]
0149,15	4-Propyldibenzothiophene	[132034-86-7]
2157,6	Bromobenzene	[108-86-1]

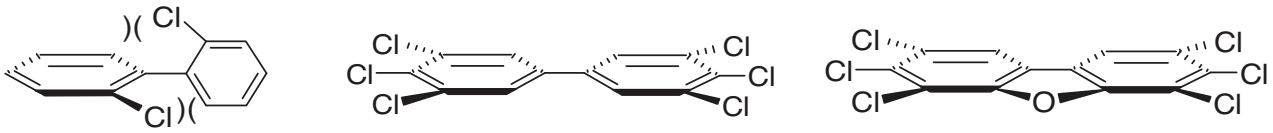
POPs (Persistent organic pollutants)

PCBs



Polychlorinated biphenyls (PCBs) have been the subject of a broad range of studies and investigations because of their environmental persistency and bioaccumulation. Their abundance as pollutants stems from their world-wide manufacture as heavy-used industrial chemicals, e.g. Aroclors with the main application as dielectric fluid in capacitors and transformators. PCBs are formed as mixtures by the addition of chlorine to biphenyl.

PCB congeners can be classified as coplar, dioxinlike with none or one orthosubstitution and nonplanar with substitutions in the ortho-positions. The co-planer PCBs shows a similar toxicity as the dibenzofurans and the dioxins. See also page 354 and onward.



Non-planar and coplanar PCBs compared with the conformation of dibenxofurans

F-PCBs® fluorinated internal standards for PCB analysis – a flexible and cost-efficient alternative

Mono- and difluorinated PCBs are closely similar to the parent PCBs in terms of physico-chemical properties, and are ideal internal or surrogate standards for GC-MS, GC-ECD, GC-FID and twodimentional GC.
The F-PCB® internal standards offered by Chiron have several advantages over the more traditionally used ^{13}C isotopes and unlabelled internal standards:

- Cost efficient. Much cheaper than the ^{13}C isotopes.
- Gives one single, pure isotope (F has only one isotope)
- Can be used with GC-ECD detection, ^{13}C can not since they coelute with the native.
- Do not discriminate from the native upon work-up.
- "Designer retention times" (ortho-, meta-, para-F) possible for optimal elution rate.

Dioxin-like F-PCBs®

NEW

Chiron No.	Compound	PCB No.	Conc. /1 mL
2863.12	5-Fluoro-3,3'4,4'-tetrachlorobiphenyl	F-PCB-77	10 µg/mL
2344.12	3'-Fluoro-3,4,4',5-tetrachlorobiphenyl	F-CB-81	10 µg/mL
2864.12	5'-Fluoro-2,3,3',4,4'-pentachlorobipenyl	F-CB-105	10 µg/mL
2870.12	3'Fluoro-2,3,4,4',5-pentachlorobiphenyl	F-CB-114	10 µg/mL
2865.12	5'-Fluoro-2,3',4,4',5-pentachlorobiphenyl	F-CB-118	10 µg/mL
2866.12	5'-Fluoro-3,3',4,4',5-pentachlorobiphenyl	F-CB-126	10 µg/mL
2871.12	5'-Fluoro-2,3,3',4,4',5-hexachlorobiphenyl	F-CB-156	10 µg/mL

F-PCB® internal standards

For complete listing see the Compounds section, pages 354-355.
Solutions of single internal standards in isooctane, 1 or 1.1mL

Chiron No.	Compound	PCB No.	Conc.
2654.12-100-IO	4-Chloro-4'-fluorobiphenyl	F-PCB-3 p	100 µg/mL
2745.12-100-IO	3'-Fluoro-3,5-dichlorobiphenyl	F-PCB-14	100 µg/mL
2655.12-100-IO	3-Fluoro-4,4'-dichlorobiphenyl	F-PCB-15	100 µg/mL
2656.12-100-IO	3-Fluoro-2,2',5-trichlorobiphenyl	F-PCB-18 m	100 µg/mL
2657.12-100-IO	3'-Fluoro-2,3,4'-trichlorobiphenyl	F-PCB-22 m	100 µg/mL
2228.12-100-IO	**3'-Fluoro-2,4,4'-trichlorobiphenyl***	**F-PCB-28 m**	**100 µg/mL**
2223.12-100-IO	3'-Fluoro-2,4,5-trichlorobipehnyl	F-PCB-29 m	100 µg/mL
2224.12-100-IO	2'-Fluoro-2,4,6-trichlorobiphenyl	F-PCB-30 o	100 µg/mL
2225.12-100-IO	3'-Fluoro-2,4,6-trichlorobiphenyl	F-PCB-30 m	100 µg/mL
2229.12-100-IO	4'-Fluoro-2,4,6-trichlorobiphenyl	F-PCB-30 p	100 µg/mL
2658.12-100-IO	3'-Fluoro-3,4,4'-trichlorobiphenyl	F-PCB-37 m	100 µg/mL
2666.12v	3'-Fluoro-3,4',5-trichlorobiphenyl	F-PCB-39	100 µg/mL
2660.12-100-IO	**3-Fluoro-2,2',5,5'-tetrachlorobiphenyl***	**F-PCB-52 m**	**100 µg/mL**
2869.12-100-IO	3'-Fluoro-2,3,5,6-tetrachlorobiphenyl	F-PCB-65	100 µg/mL
2222.12-100-IO	4'-Fluoro-2,3',4,5-tetrachlorobiphenyl	F-PCB-67	100 µg/mL
2863.12-10-IO	5-Fluoro-3,3'4,4'-tetrachlorobiphenyl	F-PCB-77	10 µg/mL
2344.12-10-IO	3'-Fluoro-3,4,4',5-tetrachlorobiphenyl	F-PCB-81	10 µg/mL
2864.12-10-IO	5'-Fluoro-2,3,3',4,4'-pentachlorobiphenyl	F-PCB-105	10 µg/mL
2870.12-10-IO	3'Fluoro-2,3,4,4',5-pentachlorobiphenyl	F-PCB-114	10 µg/mL
2868.12-10-IO	3'-Fluoro-2,3,4',5,6-pentachlorobiphenyl	F-PCB-117	10 µg/mL
2865.12-10-IO	5'-Fluoro-2,3',4,4',5-pentachlorobiphenyl	F-PCB-118	10 µg/mL
2866.12-10-IO	5'-Fluoro-3,3',4,4',5-pentachlorobiphenyl	F-PCB-126	10 µg/mL
2871.12-10-IO	5'-Fluoro-2,3,3',4,4',5-hexachlorobiphenyl	F-PCB-156	10 µg/mL
2746.12-10-IO	3'-Fluoro-2,3,4,4',5,6-hexachlorobiphenyl	F-PCB-166	10 µg/mL

*** Bold items are also on the Dutch Seven list**

Native PCBs

Chiron offers single native PCBs in solution and as neat material for analysis and toxicological studies. Mixtures are offered according to international methods and on request. Please inquire for custom synthesis of bulk material.

Dutch seven PCBs

Solutions of single reference substances, internal standards and multiple component solution, 1 mL.

Chiron No.	Compound	PCB No.	Conc.
1999.12-100-IO	2,4,4'-Trichlorobiphenyl	PCB-28	100 µg/mL
2000.12-100-IO	2,2',5,5'-Tetrachlorobiphenyl	PCB-52	100 µg/mL
2001.12-100-IO	2,2',4,5,5'-Pentachlorobiphenyl	PCB-101	100 µg/mL
2002.12-100-IO	2,3',4,4'5-Pentachlorobiphenyl	PCB-118	100 µg/mL
2003.12-100-IO	2,2',3,4,4',5'-Hexachlorobiphenyl	PCB-138	100 µg/mL
2004.12-100-IO	2,2',4,4',5,5'Hexachlorobiphenyl	PCB-153	100 µg/mL
2005.12-100-IO	2,2'3,4,4',5,5'-Heptachlorobiphenyl	PCB-180	100 µg/mL
S-4236-100-IO	Dutch Seven PCBs – Multiple Comp. Solution		100 µg/mL

Dioxin-like PCBs

Chiron No.	Compound	PCB No.	Conc. /1 mL
2006.12-100-IO	3,3'4,4'-Tetrachlorobiphenyl	PCB-77	100 µg/mL
2007.12-100-IO	3,4,4',5-Tetrachlorobiphenyl	PCB-81	100 µg/mL
2008.12-100-IO	2,3,3',4,4'-Pentachlorobiphenyl	PCB-105	100 µg/mL
2009.12-100-IO	2,3,4,4',5-Pentachlorobiphenyl	PCB-114	100 µg/mL
2012.12-100-IO	3,3',4,4',5-Pentachlorobiphenyl	PCB-126	100 µg/mL
2013.12-100-IO	2,3,3',4,4',5-Hexachlorobiphenyl	PCB-156	100 µg/mL
2014.12-100-IO	2,3,3',4,4',5'-Hexachlorobiphenyl	PCB-157	100 µg/mL
2015.12-100-IO	2,3',4,4',5,5'-Hexachlorobiphenyl	PCB-167	100 µg/mL
2220.12-100-IO	3,3',4,4',5,5'-Hexachlorobiphenyl	PCB-169	100 µg/mL
2016.12-100-IO	2,3,3',4,4',5,5'-Heptachlorobiphenyl	PCB-189	100 µg/mL

Optional calibration standards

Chiron No.	Compound	PCB No.	Conc. /1 mL
2267.12-100-IO	2,2',3,4,4'5-Heptachlorobiphenyl	PCB-170	100 µg/mL
2005.12-100-IO	2,2',3,4,4',5,5'-Heptachlorobiphenyl	PCB-180	100 µg/mL

S-4237-2-IO — WHO Dioxin like PCB mixture,

11 Analytes, each 2 µg/mL in isooctane

Chiron No.	Compound	PCB No.
2006.12-2-IO	3,3´4,4´-Tetrachlorobiphenyl	PCB-77
2007.12-2-IO	3,4,4´,5-Tetrachlorobiphenyl	PCB-81
2008.12-2-IO	2,3,3´,4,4´-Pentachlorobiphenyl	PCB-105
2009.12-2-IO	2,3,4,4´,5-Pentachlorobiphenyl	PCB-114
2002.12-2-IO	2,3´,4,4´,5-Pentachlorobiphenyl	PCB-118
2011.12-2-IO	2´,3,4,4´,5-Pentachlorobiphenyl	PCB-123
2012.12-2-IO	3,3´,4,4´,5-Pentachlorobiphenyl	PCB-126
2013.12-2-IO	2,3,3´,4,4´,5-Hexachlorobiphenyl	PCB-156
2014.12-2-IO	2,3,3´,4,4´,5´-Hexachlorobiphenyl	PCB-157
2015.12-2-IO	2,3´,4,4´,5,5´-Hexachlorobiphenyl	PCB-167
2016.12-2-IO	2,3,3´,4,4´,5,5´-Heptachlorobophenyl	PCB-189

Technical mixtures

Available in concentrations 10-1000 ng/μL in isooctane

Chiron No.	Name
2124.12	Aroclor 1016
2125.12	Aroclor 1221
2661.12	Aroclor 1232
2126.12	Aroclor 1242
2127.12	Aroclor 1248
2128.12	Aroclor 1254
2129.12	Aroclor 1260

International standard methods for PCB analysis

ISO 17858-2004	Water quality - Dioxin-like PCBs by GC-MS
ISO 10382-2002	Soil quality – Organochlorine pesticided and PCBs by GC-ECD
ISO 6468-1996	Water quality – Organochlorine insecticides and PCBs by GC methods
EPA 505-1995	Organohalide pesticides and PCBs in water by GC
EPA 608-1984	Organochlorine pestisides and PCBs by GC and GC-MS (cf methods 625) in municipal discharges.
EPA 8082-1996	PCBs from solid and aqueous matices by GC-ECD or GC-ELCD.
EPA 1668A-1999	PCB congeners in water, soil, sediments and tissue by HRGC/HRMS
EPA 8270C-1996	Semivolatile compounds from solid waste, soil, air, and water by GC-MS
"The Dutch Seven PCBs"	

S-4417-10-AN

PCB Mixture 1

7 Analytes, each 10μg/mL in acetonitrile; unit: 10x1mL

Prod.no.	Compound	Description	CAS No.
1999.12	2,4,4'-Trichlorobiphenyl	PCB 28	[7012-37-5]
2000.12	2,2'5,5'-Tetrachlorobiphenyl	PCB 52	[35693-99-3]
20001.12	2,2'4,5,5'-Pentachlorobiphenyl	PCB 101	[37680-73-2]
2003.12	2,2',3,4,4',5-Hexachlorobiphenyl	PCB 138	[35065-28-2]
2004.12	2,2'4,4'5,5'-Hexachlorobiphenyl	PCB 153	[35065-27-1]
2005.12	2,2',3,4,4',5,5'-Heptachlorophenyl	PCB 180	[35065-29-3]
2268.12	2,2',3,3',4,4',5,5'-Octachlorophenyl	PCB 194	[35694-08-7]

S-4418-1MG

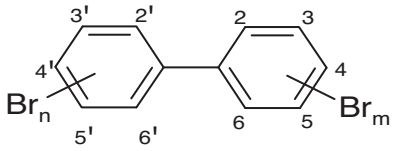
PCB Mixture 2

7 Analytes, each 1 mL neat

Prod.no.	Compound	Description	CAS No.
1999.12	2,4,4'-Trichlorobiphenyl	PCB 28	[7012-37-5]
2000.12	2,2',5,5'-Tetrachlorobiphenyl	PCB 52	[35693-99-3]
2001.12	2,2',4,5,5'-Pentachlorobiphenyl	PCB 101	[37680-73-2]
2002.12	2,3',4,4',5-Pentachlorobiphenyl	PCB 118	[31508-00-6]
2003.12	2,2',3,4,4',5-Hexachlorobiphenyl	PCB 138	[35065-28-2]
2004.12	2,2',4,4',5,5'-Hexachlorobiphenyl	PCB 153	[35065-27-1]
2005.12	2,2',3,4,4',5,5'-Heptachlorobiphenyl	PCB 180	[35065-29-3]

PBBs (Polybrominated biphenyls)

NEW

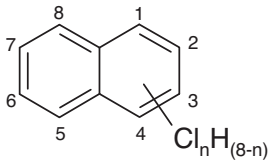


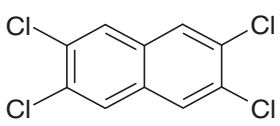
Native standards

3089.12-50-IO	2-Bromobiphenyl	PBB-1	[2052-07-5]	50µg/mL
3090.12-50-IO	3-Bromobiphenyl	PBB-2	[2113-57-7]	50µg/mL
3091.12-50-IO	4-Bromobiphenyl	PBB-3	[92-66-0]	50µg/mL
3092.12-50-IO	2,2'-Dibromobiphenyl	PBB-4	[13029-09-9]	50µg/mL
3093.12-50-IO	2,4-Dibromobiphenyl	PBB-7	[53592-10-2]	50µg/mL
3094.12-50-IO	2,5-Dibromobiphenyl	PBB-9	[57422-77-2]	50µg/mL
3095.12-50-IO	2,6-Dibromobiphenyl	PBB-10	[59080-32-9]	50µg/mL
3096.12-50-IO	4,4'-Dibromobiphenyl	PBB-15	[92-86-4]	50µg/mL
3097.12-50-IO	2,2',5-Tribromobiphenyl	PBB-18	[59080-34-1]	50µg/mL
3098.12-50-IO	2,3',5-Tribromobiphenyl	PBB-26	[59080-35-2]	50µg/mL
3099.12-50-IO	2,4',5-Tribromobiphenyl	PBB-31	[59080-36-3]	50µg/mL
2664.12-50-IO	2,4,5-Tribromobiphenyl	PBB-29	[118-79-6]	50µg/mL
2744.12-35-IO	2,4,6-Tribromobiphenyl	PBB-30	[59080-33-0]	35µg/mL
2744.12-50-IO	2,4,6-Tribromobiphenyl	PBB-30	[59080-33-0]	50µg/mL
3101.12-50-IO	3,4,5-Tribromobiphenyl	PBB-38	[115245-08-4]	50µg/mL
3102.12-50-IO	2,2',4,5'-Tetrabromobiphenyl	PBB-49	[60044-24-8]	50µg/mL
3103.12-50-IO	2,2',5,5'-Tetrabromobiphenyl	PBB-52	[59080-37-4]	50µg/mL
3104.12-50-IO	2,2',5,6'-Tetrabromobiphenyl	PBB-56	[60044-25-9]	50µg/mL
3105.12-50-IO	3,3',5,5'-Tetrabromobiphenyl	PBB-80	[16400-50-3]	50µg/mL
3106.12-50-IO	2,2',4,5,5'-Pentabromobiphenyl	PBB-101	[67888-96-4]	50µg/mL
3107.12-50-IO	2,2',4,5',6-Pentabromobiphenyl	PBB-103	[59080-39-6]	50µg/mL
3108.12-50-IO	2,2',4,4',5,5'-Hexabromobiphenyl	PBB-153	[59080-40-9]	50µg/mL
3110.12-50-IO	2,2',4,4',6,6'-Hexabromobiphenyl	PBB-155	[59261-08-4]	50µg/mL
3109.12-10-IO	3,3',4,4',5,5'-Hexabromobiphenyl	PBB-169	[60044-26-0]	10µg/mL
2679.12-50-IO	Octabromodiphenyl, techn.		[27858-07-7]	50µg/mL
2677.12-50-IO	Decabromodiphenyl	PBB-209	[13654-09-6]	50µg/mL
3111.26-KIT	PBB Kit			

PCNs (Polychlorinated naphthalenes)

NEW





2,3,6,7-Tetrachloronaphthalene
PCN 48

PCNs are polychlorinated naphthalenes. Although PCNs have been known for about 170 years, and have been commercially produced and **used over a period of 100 years**, only little attention is paid to their formation, sources, occurrence, fate and effects. Technical mixtures of PCNs have been commercially produced under the brand names Halowax (U.S.), Seekay (U.K) and Nibren wax (Germany) for uses similar to PCB mixtures (Aroclor), which also contain PCNs as impurities.

There are 75 PCN congeners.

Individual native PCNs

Chiron No.	Compound	PCN No.	CAS No.	Conc.
1993.10-50-IO	1-Chloronaphthalene	PCN-1	[90-13-1]	50µg/mL
1994.10-50-IO	2-Chloronaphthalene	PCN-2	[91-58-7]	50µg/mL
1995.10-50-IO	1,4-Dichloronaphthalene	PCN-5	[1825-31-6]	50µg/mL
1996.10-50-IO	1,5-Dichloronaphthalene	PCN-6	[1825-30-5]	50µg/mL
1997.10-50-IO	2,3-Dichloronaphthalene	PCN-10	[2050-75-1]	50µg/mL
3112.10-50-IO	2,6-Dichloronaphthalene	PCN-11	[2065-70-5]	50µg/mL
3621.10-50-IO	2,7-Dichloronaphthalene	PCN-12	[2198-77-8]	50µg/mL
3744.10-50-IO	1,2,3,4-Tetrachloronaphthalene	PCN-27	[20020-02-4]	50µg/mL
3752.10-50-IO	Tetrachloronaphthalene, mix			50µg/mL
1998.10-50-IO	Octachloronaphthalene	PCN-75	[2234-13-1]	50µg/mL
3113.10-KIT	PCN Kit			

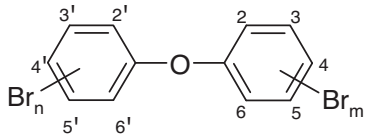
50µg/mL in isooctane, 1 or 1.1mL

PBNs (Polybrominated naphthalenes)

NEW

Chiron No.	Compound	PBN No.	CAS. No.	Conc.
3114.10-50-IO	1-Bromonaphthalene	PBN-1	[90-11-9]	50µg/mL
3115.10-50-IO	2-Bromonaphthalene	PBN-2	[580-13-2]	50µg/mL
3116.10-50-IO	1,4-Dibromonaphthalene	PBN-5	[83-53-4]	50µg/mL
3117.10-50-IO	2,3-Dibromonaphthalene	PBN-10	[13214-70-5]	50µg/mL
3118.10-50-IO	2,6-Dibromonaphthalene	PBN-11	[13720-06-4]	50µg/mL
3119.10-50-IO	2,7-Dibromonaphthalene	PBN-12	[58556-75-5]	50µg/mL
3120.6-KIT	PBN Kit			

PBDE flame retardants



PBDEs have been used as flame retardants over the past two decades, and are globally distributed in the environment. PBDEs accumulate in the food chain and there is a strong concern about the health effects of PBDE exposure. Both single and multi-component standards have been developed in convenient concentrations and solvents to assist researchers in this analysis. According to their presence in different technical mixtures and samples, we offer pure standards.

Neat material is available for toxicological studies. Please inquire for custom synthesis of bulk material.

F-PBDE® internal standards

Chiron No.	Compound	PBDE No.	Conc.
2258.12-50-IO	3'-Fluoro-2,4-dibromodiphenyl ether	F-PBDE-7	50 µg/mL
2257.12-50-IO	3'-Fluoro-3,4-dibromodiphenyl ether	F-PBDE-12	50 µg/mL
1926.12-50-IO	4'-Fluoro-2,3',4-tribromodiphenyl ether	F-PBDE-25	50 µg/mL
1927.12-50-IO	4'-Fluoro-2,3',6-tribromodiphenyl ether	F-PBDE-27	50 µg/mL
2160.12-50-IO	3'-Fluoro-,2,4,4'-tribromodiphenyl ether	F-PBDE-28	50 µg/mL
2161.12-50-IO	6-Fluoro-2,2',4,4'-tetrabromodiphenyl ether	F-PBDE-47	50 µg/mL

2506.12-50-IO	5,5'-Difluoro-2,2',4,4'-tetrabromodiphenyl ether	2F-PBDE-47	50 µg/mL
2162.12-50-IO	6-Fluoro-2,3',4,4'-tetrabromodiphenyl ether	F-PBDE-66	50 µg/mL
1928.12-50-IO	4'-Fluoro-2,3',4,6-tetrabromodiphenyl ether	F-PBDE-69	50 µg/mL
2503.12-50-IO	5,6-Difluoro-2,2',3,4,4'-pentabromodiphenyl ether	2F-PBDE-85	50 µg/mL
2505.12-50-IO	3,6-Difluoro-2,2',4,4,'5-pentabromodiphenyl ether	2F-PBDE-99	50 µg/mL
2163.12-50-IO	3-Fluoro-2,2',4,4',6-pentabromodiphenyl ether	F-PBDE-100	50 µg/mL
2164.12-50-IO	3-Fluoro-2,3',4,4',6-pentabromodiphenyl ether	F-PBDE-119	50 µg/mL
2504.12-50-IO	3,5-Difluoro-2,3',4,4',6-pentabromodiphenyl ether	2F-PBDE-119	50 µg/mL
1929.12-50-IO	4'-Fluoro-2,3,3',4,5,6-hexabromodiphenyl ether	F-PBDE-160	50 µg/mL
2167.12-50-IO	2,4'-Difluoro-2,3,3',4,5,5',6,6'-octabromodiphenyl ether	2F-PBDE-201	50 µg/mL
2168.12-50-IO	4'-Fluoro-2,2',3,3',4,5,5'6,6'-nonabromodiphenyl ether	F-PBDE-208	50 µg/mL

References: Korytar et al.: *J.Chromatogr. A* 1065, 239-249 (2005); 1100, 200-207 (2005)
Liu et al.: *Chemosphere* 64, 250-263 (2006)
Fiksdahl et al.: *Tetrahedron* 62, 3564-72 (2006)

Native standards

Lake michigan study

Solutions of single reference substances
KIT: 9 compounds, 50 µg/mL each in isooctane

Chiron No.	Compound	PBDE No.	Conc.
1961.12-50-IO	2,4,4'-Tribromodiphenyl ether	PBDE-28	50 µg/mL
1962.12-50-IO	2,2',4,4'-Tetrabromodiphenyl ether	PBDE-47	50 µg/mL
1964.12-50-IO	2,3',4,4'-Tetrabromodiphenyl ether	PBDE-66	50 µg/mL
1966.12-50-IO	2,2',3,4,4'-Pentabromodiphenyl ether	PBDE-85	50 µg/mL
1967.12-50-IO	2,2',4,4',5-Pentabromodiphenyl ether	PBDE-99	50 µg/mL
1968.12-50-IO	2,2',4,4',6-Pentabromodiphenyl ether	PBDE-100	50 µg/mL
1970.12-50-IO	2,2',3,4,4',5'-Hexabromodiphenyl ether	PBDE-138	50 µg/mL
1971.12-50-IO	2,2',4,4',5,5'-Hexabromodiphenyl ether	PBDE-153	50 µg/mL
1972.12-50-IO	2,2',4,4',5,6'-Hexabromodiphenyl ether	PBDE-154	50 µg/mL
2653.9-KIT	Lake Michigan Study Kit		

S-4391-10-IO Multiple component solution of the above PBDEs, each 10 µg/mL (1mL)

Other relevant PBDEs

Solutions of single reference substances
KIT: 11 compounds, 50 µg/mL each in isooctane

Chiron No.	Compound	PBDE No.	Conc.
1960.12-50-IO	2,3',4-Tribromodiphenyl ether	PBDE-25	50 µg/mL
1963.12-50-IO	2,2',4,5'-Tetrabromodiphenyl ether	PBDE-49	50 µg/mL
1965.12-50-IO	2',3',4',6-Tetrabromodiphenyl ether	PBDE-71	50 µg/mL
1990.12-50-IO	2,4,4',6-Tetrabromodiphenyl ether	PBDE-75	50 µg/mL
1991.12-50-IO	3,3',4,4'-Tetrabromodiphenyl ether	PBDE-77	50 µg/mL
2867.12-50-IO	2,3',4,4',5-Pentabromodiphenyl ether	PBDE-118	50 µg/mL
1969.12-50-IO	2,3',4,4',6-Pentabromodiphenyl ether	PBDE-119	50 µg/mL
1973.12-50-IO	2,2',3,4,4',5',6-Heptabromodiphenyl ether	PBDE-183	50 µg/mL

1992.12-50-IO	2,3,3',4,4',5,6-Heptabromodiphenyl ether	PBDE-190	50 µg/mL
1975.12-50-IO	2,2',3,4,4',5,5',6-Octabromodiphenyl ether	PBDE-203	50 µg/mL
2647.12-50-IO	2,3,3',4,4',5,5',6-Octabromodiphenyl ether	PBDE 205	50 µg/mL
1811.12-50-IO	Decabromodiphenyl ether	PBDE-209	50 µg/mL
2665.12-KIT	PBDE Kit		

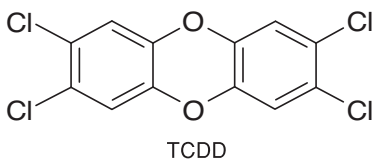
International methods

- ISO 22032:2006	Water quality – PBDEs by GC
- ISO/DIS 23061:2005	Soil quality – PBDEs by GC
- EPA 527.1:2005	Drinking water – Pesticides and PBDEs by GC-MS
- EPA 1614	PBDEs by HRGC/HRMS

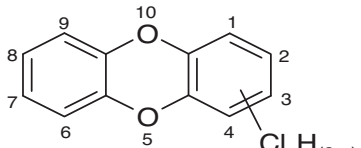
Other flame retardants

2071.7-K-IP	4-Chloro-3-methylphenol	[59-50-7]	1000µg/mL
2061.6-K-IP	2,4-Dibromophenol	[615-58-7]	1000µg/mL
2670.14-50-IO	Decabromodiphenylethane	[84852-53-9]	50µg/mL
2671.5-50-IP	Dibromoneopentylglycol	[3296-90-0]	50µg/mL
2678.6-50-IO	Hexabromobenzene	[87-82-1]	50µg/mL
1894.6-50-IO	1,2,3,4,5,6-Hexabromocyclohexane	[1837-91-8]	50µg/mL
1893.12-K-IO	1,2,5,6,9,10-Hexabromocyclododecane	[3194-55-6]	1000µg/mL
2679.12-50-IO	Octabromodiphenyl, techn.	[27858-07-7]	50µg/mL
2672.6-50-IO	Pentabromophenol	[608-71-9]	50µg/mL
2673.7-50-IO	Pentabromotoluene	[87-83-2]	50µg/mL
2674.15-50-IO	Tetrabromobisphenol A	[79-94-7]	50µg/mL
2675.17-50-IO	Tetrabromobisphenol A dimethyl ether	[37853-61-5]	50µg/mL
2060.6-K-IP	2,4,6-Tribromophenol	[118-79-6]	1000µg/mL
2676.8-50-IO	Tetrabromophthalic anhydride	[632-79-1]	50µg/mL
1812.18-50-CY	Tetradecabromo-1,4-diphenoxybenzene	[58965-66-5]	50µg/mL

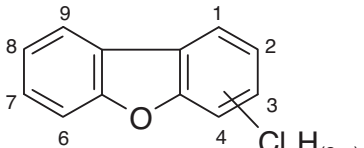
Dioxins and furans



TCDD



PCDD



PCDF

Polychlorinated dioxins (PCDDs) and polychlorinated dibenzofuranes (PCDFs or "furans") are formed during combustion processes, such as waste incineration, fires, and during certain manufacturing processes, but have no industrial applications and are not produced as such. The most toxic of these compounds is 2,3,7,8-tetra-chlorodibenzo-p-dioxin, TCDD.
There are 75 PCDD congeners and 135 PCDF congeners.

PCDDs

PCDDs: individual solutions

50 µg/mL in toluene; name according to IUPAC:

2029.12-50-T	Dibenzo-p-dioxin	[262-12-4]
2030.12-50-T	1-Chlorodibenzo-p-dioxin	[39227-53-7]

2032.12-50-T	2-Chlorodibenzo-p-dioxin	[39227-54-8]
2031.12-50-T	2,7-Dichlorodibenzo-p-dioxin	[33857-26-0]
2033.12-50-T	1,2,4-Trichlorodibenzo-p-dioxin	[39227-58-2]
2034.12-50-T	1,2,3,4-Tetrachlorodibenzo-p-dioxin	[30746-58-8]
2036.12-50-T	Octachlorodibenzo-p-dioxin	[3268-87-9]

PCDFs

PCDFs: individual solutions

50 µg/mL in toluene; name according to IUPAC:

1100.12-50-T	Dibenzofuran	[132-64-91]
2038.12-50-T	2,8-Dichlorodibenzofuran	[5409-83-6]
2039.12-50-T	Octachlorodibenzofuran	[39001-02-0]

PCAs, SCCPs, C10-C13 polychloroalkanes

Polychloro-n-alkanes (PCAs) or chlorinated paraffins are a class of industrial chemicals used as high-temperature lubricants in metal-working machinery and as flame-retardant plasticizers in vinyl plastics. Less common applications include the use as flame-retardants in rubber, paints, adhesives and as sealants.

Industrially, the PCAs are synthesized by direct chlorination of n-alkane feedstock with molecular chlorine at elevated temperatures and pressures, and sometimes in the presence of UV-light. PCAs fall into three categories, C_{10}-C_{13} (short, "SCCP"), C_{14}-C_{17} (medium, "MCCP"), and C_{20}-C_{30} (long," LCCP"). They are further sub-categorized into their weight content of chlorine, 40-50%, 50-60% and 60-70%.

C10-C13 PCA ("SCCPs" short-chain-chlorinated-paraffines)

Listed as Priority Pollutants in the US, Canada, and Europe
In the US, C10-C13 PCAs have been placed on the US Environmental Protection Agency (EPA) Toxic Release Inventory, in Canada they are classified as "Track 1" Priority Toxic substances under the Canadian Environmental Protection Act, and in Europe the C_{10}-C_{13} PCAs are included on the list of priority substances in the field of water policy submitted by the Commision of European Communities for the European Parliament and Council Decision.

Analysis of PCAs

PCAs are analyzed by GC using ECD detector, or more sophisticated by high resolution gas chromatography/electron capture negative ion-mass spectrometry (HRGC/ECNI-MS).

Chiron No.	Molecular formula	Compound	% Weight of Cl
		Dichloro	
1664.8-K-IO	$C_8H_{16}C_{l2}$	1,2-Dichlorooctane	38,7
1665.9-K-IO	$C_9H_{18}C_{l2}$	1,2-Dichlorononane	36,0
1666.10-K-IO	$C_{10}H_{20}C_{l2}$	1,2-Dichlorodecane	33,6
1667.11-K-IO	$C_{11}H_{22}C_{l2}$	1,2-Dichloroundecane	31,5
1668.12-K-IO	$C_{12}H_{24}C_{l2}$	1,2-Dichlorododecane	29,6
1663.12-K-IO	$C_{12}H_{24}C_{l2}$	1,12-Dichlorododecane	29,6
1669.13-K-IO	$C_{13}H_{26}C_{l2}$	1,2-Dichlorotridecane	28,0
1670.14-K-IO	$C_{14}H_{28}C_{l2}$	1,2-Dichlorotetradecane	26,5
1879.8-K-IO		Dichloroalkane Kit	
		Tetrachloro	
1672.8-K-IO	$C_8H_{14}C_{l4}$	1,2,7,8-Tetrachlorooctane	56,3
1660.8-K-IO	$C_8H_{14}C_{l4}$	1,1,1,3-Tetrachlorooctane	56,3

1673.9-K-IO	$C_9H_{16}C_{14}$	1,2,8,9-Tetrachlorononane	53,3
1661.9-K-IO	$C_9H_{16}C_{14}$	1,1,1,3-Tetrachlorononane	53,3
1671.10-K-IO	$C_{10}H_{18}C_{14}$	1,2,9,10-Tetrachlorodecane	50,6
1662.10-K-IO	$C_{10}H_{18}C_{14}$	1,1,1,3-Tetrachlorodecane	50,6
1674.11-K-IO	$C_{11}H_{20}C_{14}$	1,2,10,11-Tetrachloroundecane	48,2
1649.11-K-IO	$C_{11}H_{20}C_{14}$	1,1,1,3-Tetrachloroundecane	48,2
1675.12-K-IO	$C_{12}H_{22}C_{14}$	1,2,11,12-Tetrachlorododecane	46,0
1651.12-K-IO	$C_{12}H_{22}C_{14}$	1,1,1,3-Tetrachlorododecane	46,0
1653.13-K-IO	$C_{13}H_{24}C_{14}$	1,1,1,3-Tetrachlorotridecane	44,0
1677.14-K-IO	$C_{14}H_{26}C_{14}$	1,2,13,14-Tetrachlorotetradecane	42,2
1676.14-K-IO	$C_{14}H_{26}C_{14}$	1,1,1,3-Tetrachlorotetradecane	42,2
1880.13-K-IO		Tetrachloroalkane Kit	
		Hexachloro	
1658.9-K-IO	$C_9H_{14}C_{16}$	1,1,1,3,8,9-Hexachlorononane	63,5
1659.10-K-IO	$C_{10}H_{16}C_{16}$	1,1,1,3,9,10-Hexachlorodecane	61,0
1650.11-K-IO	$C_{11}H_{18}C_{16}$	1,1,1,3,10,11-Hexachloroundecane	58,6
1652.12-K-IO	$C_{12}H_{20}C_{16}$	1,1,1,3,11,12-Hexachlorododecane	56,4
1654.13-K-IO	$C_{13}H_{22}C_{16}$	1,1,1,3,12,13-Hexachlorotridecane	54,4
1881.5-K-IO		Hexachloroalkane Kit	
		Octachloro	
1656.8-K-IO	$C_8H_{10}C_{18}$	1,1,1,3,6,8,8,8-Octachlorooctane	72,8
1622.10-K-IO	$C_{10}H_{14}C_{18}$	1,1,1,3,8,10,10,10-Octachlorodecane	67,9
1623.11-K-IO	$C_{11}H_{16}C_{18}$	1,1,1,3,9,11,11,11-Octachloroundecane	65,7
1624.12-K-IO	$C_{12}H_{18}C_{18}$	1,1,1,3,10,12,12,12-Octachlorododecane	63,6
1625.13-K-IO	$C_{13}H_{20}C_{18}$	1,1,1,3,11,13,13,13-Octachlorotridecane	61,7
1678.14-K-IO	$C_{14}H_{22}C_{18}$	1,1,1,3,12,14,14,14-Octachlorotetradecane	59,8
1882.6-Kit		Octachloroalkane Kit	
1883.8-Kit		C_8-C_9 PCA Kit	(8 samples, 1 vial each)
1884.20-Kit		C_{10}-C_{13} PCA (SCCP) Kit	(20 samples, 1 vial each)
1885.4-Kit		C_{14} PCA (MCCP) Kit	(4 samples, 1 vial each)

Pesticides, herbicides

Individual native and labelled internal standards are listed in the Compounds section, page 367 and onward.

International standards

ISO 6468: 1996	Water quality, Pesticides, PCBs and chlorobenzenes
ISO 10381:2002	Soil quality – organochlorine pesticides and PCBs
EPA 505:1995	Water – Organohalide pesticides by GC
EPA 527.1:2005	Drinking water – Pesticides and PBDEs by GC/MS

Special mixes

S-4401-10K-AN	**Pesticide Mixture**
S-4401-10K-2AN	6 Analytes, each 10 000 μg/mL in acetonitrile; units: 1x1, 1x2mL

Prod.no.	Compound	CAS No.
2768,8	Atrazine	[1912-249]
2769,9	Propazine	[139-40-2]
2770,7	Simazine	[122-34-9]
2771,9	Tertbuthylazine	[5915-41-3]
2772,6	Atrazine-desethyl	[6190-65-4]
2773,5	Atrazine-desisopropyl	[1007-28-9]

S-4402-5-2CY

Chlorinated Pesticides

6 Analytes, each 5 µg/mL in cyclohexane; units: 1x2mL

Prod.no.	Compound	CAS No.
2774,12	Aldrin	[309-00-2]
2775,12	Dieldrin	[60-57-1]
2026,6	Lindane	[58-89-9]
2776,10	Heptachlor	[76-44-8]
2777,10	Heptachlor-endo-epoxide (cis-)	[1024-57-3]
2778,10	Hepotachlor-exo-epoxide (trans-)	[28044-83-9]

S-4403-5K-CY
S-4403-5K-2CY

Phosphorous Containing Pesticides

5 Analytes, each 5000 µg/mL in cyclohexane; units: 1x1, 1x2 mL

Prod.no.	Compound	CAS No.
2779,12	Diazinon	[333-41-5]
2780,9	Ethion	[563-12-2]
1396,10	Malathion	[121-75-5]
2781,9	Fenitrothion	[122-14-5]
2782,10	Parathion-ethyl	[56-38-2]

S-4338-100-ME
S-4338-100-10ME

Conazoles Mixture

4 Analytes, each 100 µg/mL in methanol; units: 1x1 mL, 1x10 mL

Prod.no.	Compound	CAS no.
2319,15	Cyproconazole	[113096-99-4]
2320,15	Propiconazole	[60207-90-1]
2318,16	Tebuconazole	[107534-96-3]
2321,17	Epoxiconazole	[133855-98-8]

Chlorobenzenes

Internal standards

1957.6-K-IO	1,4-Dichlorobenzene-d_4	[3855-82-1]	1000µg/mL	isooctane
2727.6-100-IO	Hexachlorobenzene-$^{13}C_6$	[93952-14-8]	100µg/mL	isooctane
2047.6-K-ME	1-Chloro-4-fluorobenzene, Internal standard for Gasoline Range Analysis	[352-33-0]	1000µg/mL	methanol
2047.6-K-ME	1-Chloro-4-fluorobenzene, Internal standard for Gasoline Range Analysis	[352-33-0]	1000µg/mL	methanol

Native chlorobenzenes

3360.6-K-IO	Chlorobenzene	[108-90-7]	1000µg/mL	isooctane
3364.6-K-IO	1,2-Dichlorobenzene	[95-50-1]	1000µg/mL	isooctane
3365.6-K-IO	1,3-Dichlorobenzene	[541-73-1]	1000µg/mL	isooctane
3366.6-K-IO	1,4-Dichlorobenzene	[106-46-7]	1000µg/mL	isooctane
3330.6-K-IO	1,2,3-Trichlorobenzene	[87-61-6]	1000µg/mL	isooctane
3519.6-K-IO	1,2,4-Trichlorobenzene	[120-82-1]	1000µg/mL	isooctane
3749.6-K-IO	1,3,5-Trichlorobenzene	[108-70-3]	1000µg/mL	isooctane
3750.6-K-IO	1,2,3,4-Tetrachlorobenzene	[634-66-2]	1000µg/mL	isooctane
3751.6-K-IO	1,2,3,5-Tetrachlorobenzene	[634-90-2]	1000µg/mL	isooctane
3656.6-K-IO	1,2,4,5-Tetrachlorobenzene	[95-94-3]	1000µg/mL	isooctane
2025.6-K-IO	Pentachlorobenzene	[608-93-5]	1000µg/mL	isooctane
1356.6-K-IO	Hexachlorobenzene	[118-74-1]	1000µg/mL	isooctane
3664.14-KIT-S	Chlorobenzene Kit (Natives in solution)			

Also available in neat form, see the Compounds section, page 286.

Bromobenzenes

2157.6-50-IO	Bromobenzene	[106-86-1]	50µg/mL	isooctane
3657.6-50-IO	1,2-Dibromobenzene	[583-53-9]	50µg/mL	isooctane
3658.6-50-IO	1,3-Dibromobenzene	[108-36-1]	50µg/mL	isooctane
3659.6-50-IO	1,4-Dibromobenzene	[106-37-6]	50µg/mL	isooctane
3660.6-50-IO	1,3,5-Tribromobenzene	[626-39-1]	50µg/mL	isooctane
3665.6-50-IO	1,2,4,5-Tetrabromobenzene	[636-28-2]	50µg/mL	isooctane
2673.7-50-IO	Pentabromotoluene	[87-83-2]	50µg/mL	isooctane
2678.6-50-IO	Hexabromobenzene	[87-82-1]	50µg/mL	isooctane
3666.8-KIT	Bromobenzene Kit			

Also available in neat form, see the Compounds section, page 287.

Chlorophenols

Monochlorophenols

2062.6-K-IP	2-Chlorophenol	[95-57-8]	1000µg/mL	isopropanol
2067.6-K-IP	3-Chlorophenol	[108-43-0]	1000µg/mL	isopropanol
2068.6-K-IP	4-Chlorophenol	[106-48-9]	1000µg/mL	isopropanol
2063.7-K-IP	2-Chloro-5-methylphenol	[615-74-7]	1000µg/mL	isopropanol
2070.7-K-IP	4-Chloro-2-methylphenol	[1570-64-5]	1000µg/mL	isopropanol
2071.7-K-IP	4-Chloro-3-methylphenol	[59-50-7]	1000µg/mL	isopropanol
2440.10-K-IP	2-Chloro-4-tert-butylphenol	[98-28-2]	1000µg/mL	isopropanol
2378.10-K-IP	6-Chloro-5-methyl-2-(1-methylethyl)phenol	[89-68-9]	1000µg/mL	isopropanol
2500.11-K-IP	2-Cyclopentyl-4-chlorophenol	[13347-42-7]	1000µg/mL	isopropanol
2441.13-K-IP	4-Chloro-2-benzylphenol	[120-32-1]	1000µg/mL	isopropanol
2446.10-KIT	Monochlorophenol Kit			

Dichlorophenols

2066.6-K-IP	2,3-Dichlorophenol	[576-24-9]	1000µg/mL	isopropanol
2064.6-K-IP	2,4-Dichlorophenol	[120-83-2]	1000µg/mL	isopropanol
2065.6-K-IP	2,5-Dichlorophenol	[583-78-8]	1000µg/mL	isopropanol
2069.6-K-IP	2,6-Dichlorophenol	[87-65-0]	1000µg/mL	isopropanol
2080.6-K-IP	3,4-Dichlorophenol	[95-77-2]	1000µg/mL	isopropanol
2078.6-K-IP	3,5-Dichlorophenol	[591-35-5]	1000µg/mL	isopropanol
2742.7-K-IP	2,4-Dichloro-6-methylphenol	[1570-65-6]	1000µg/mL	isopropanol
2379.8-K-IP	2,4-Dichloro-3,5-dimethylphenol	[133-53-9]	1000µg/mL	isopropanol
2738.10-K-IP	2,5-Dichloro-4-tert-butylphenol	[52780-22-0]	1000µg/mL	isopropanol
2380.9-KIT	Dichlorophenol Kit			

Trichlorophenols

2077.6-K-IP	2,3,4-Trichlorophenol	[15950-66-0]	1000µg/mL	isopropanol
2073.6-K-IP	2,3,5-Trichlorophenol	[933-78-8]	1000µg/mL	isopropanol
2072.6-K-IP	2,3,6-Trichlorophenol	[933-75-5]	1000µg/mL	isopropanol
2075.6-K-IP	2,4,5-Trichlorophenol	[95-95-4]	1000µg/mL	isopropanol
2076.6-K-IP	2,4,6-Trichlorophenol	[88-06-2]	1000µg/mL	isopropanol
2082.6-K-IP	3,4,5-Trichlorophenol	[609-19-8]	1000µg/mL	isopropanol
2381.6-KIT	Trichlorophenol Kit			

Tetra-/ pentachlorophenols

2081.6-K-IP	2,3,4,5-Tetrachlorophenol	[4901-51-3]	1000µg/mL	isopropanol
2149.6-K-IO	2,3,4,6-Tetrachlorophenol	[58-90-2]	1000µg/mL	isooctane
2074.6-K-IP	2,3,5,6-Tetrachlorophenol	[935-95-5]	1000µg/mL	isopropanol
2084.6-K-IO	Pentachlorophenol	[87-86-5]	1000µg/mL	isooctane
2084.6-K-IP	Pentachlorophenol	[87-86-5]	1000µg/mL	isopropanol
2386.4-KIT	Tetra-/Pentachlorophenol Kit			

Bromophenols

3822.6-K-IP	2-Bromophenol	[95-56-7]	1000µg/mL	isopropanol
2383.6-K-IP	4-Bromophenol	[106-41-2]	1000µg/mL	isopropanol
3721.6-K-IP	2,3-Dibromophenol	[57383-80-9]	1000µg/mL	isopropanol
2061.6-K-IP	2,4-Dibromophenol	[615-58-7]	1000µg/mL	isopropanol
2470.6-K-IP	2,5-Dibromophenol	[28165-52-8]	1000µg/mL	isopropanol
2472.6-K-IP	2,6-Dibromophenol	[608-33-3]	1000µg/mL	isopropanol
2507.6-K-IP	2,3,4-Tribromophenol	[138507-65-0]	1000µg/mL	isopropanol
2471.6-K-IP	2,3,6-Tribromophenol	[28165-57-3]	1000µg/mL	isopropanol
2060.6-K-IP	2,4,6-Tribromophenol	[118-79-6]	1000µg/mL	isopropanol
2508.6-K-IP	2,4,5-Tribromophenol	[14401-61-7]	1000µg/mL	isopropanol
2509.6-K-IP	2,3,4,6-Tetrabromophenol	[14400-94-3]	1000µg/mL	isopropanol
2672.6-50-IO	Pentabromophenol	[608-71-9]	50µg/mL	isooctane
2384.12-KIT	Bromophenol Kit			

Other

2027.4-K-IO	Hexachloro-1,3-butadiene	[87-68-3]	1000µg/mL	isooctane

VOC (Volatile organic compounds)

S-4085-5K-ME

VOC Standard Mixture 1

13 Analytes, each 5000µg/mL in methanol; units: 1x1 mL, 5x1 mL

1350.1	Chloroform	[67-66-3]
1264.7	Toluene	[108-88-1]
1351.2	1,1,1-Trichloroethane	[71-55-6]
1268.8	Ethylbenzene	[100-41-4]
1352.1	Tetrachloroethane	[56-23-5]
1266.8	m-Xylene	[108-38-3]
1354.2	Trichloroethylene	[79-01-6]
1265.8	p-Xylene	[576-26-1]
1353.2	Tetrachloroethylene	[127-18-4]
1267.8	o-Xylene	[95-47-6]
1355.2	1,2-Dichloroethane	[107-06-2]
0711.10	Naphthalene	[91-20-3]
1300.6	Benzene	[71-43-2]

S-4092-K-5PE

VOC Chloro-Bromo-methane Mixture 1

4 Analytes, each 1000 µg/ml in n-pentane; unit: 1x 5 mL

1689.1	Bromoform	
1690.1	Bromodichloromethane	[75-27-4]
1350.1	Chloroform	[67-66-3]
1691.1	Chlorodibromomethane	[124-48-1]

This standard has been made for the determination of volatile halogenated in compounds in the water on offshore platforms

S-4420-ASS-2ME

VHO/THM Mixture

6 Analytes, each concentration as listed in methanol; unit: 5x2 mL

Prod.no.	Compound	CAS No.	Concentration
1350.1	Chloroform	[67-66-3]	1000µg/mL
1690.1	Bromodichloromethane	[75-27-4]	1000µg/mL
1689.1	Chlorodibromomethane	[75-25-2]	1000µg/mL
1355.2	1,2-Dichloroethane	[107-06-2]	1000µg/mL
1354.2	Trichloroethylene	[79-01-6]	1000µg/mL
1353.2	Tetrachloroethylene	[127-18-4]	100µg/mL

Miscellaneous mixtures

S-4227-10-2DC

GC-MS Test Mixture

16 Analytes, each 10 µg/mL in dichloromethane; unit: 5x2 mL

1400.3	Trimethylphosphate	[512-56-1]
0413.10	n-Decane	[124-18-5]
1365.8	2,6-Dimethylphenol	[576-26-1]
0415.12	n-Dodecane	[112-40-5]
1397.6	5-Chloro-2-methylanaline	[95-79-4]
0417.14	n-Tetradecane	[629-59-4]
1399.12	Tributylphosphate	[126-73-8]
0419.16	n-Hexadecane	[544-76-3]
0884.12	Dibenzothiophene	[132-65-0]
0421.18	n-Octadecane	[593-45-3]
1396.10	Malathion	[121-75-5]
0423.20	n-Eicosane	[112-95-8]
1398.19	Methylstearate	[112-61-8]
0401.22	n-Docosane	[629-97-0]
1242.8	n-Octane	[111-65-9]
0403.24	n-Tetracosane	[646-31-1]

S-4005-5K-AC

3,4-Dimercaptotoluene

5000µg/mL in acetone, 5 x 1 mL

S-4404-100-10AN

Phenone mixture

9 Analytes, each 100µg/mL in acetonitrile; unit: 1x10mL

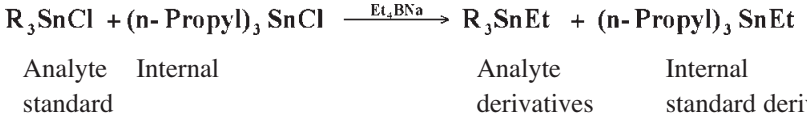
Prod.no.	Compound	CAS no.
2754.8	Acetanilide	[103-84-4]
2751.8	Acetophenone	[98-86-2]
2749.9	Propiophenone	[93-55-0]
2758.10	Butyrophenone	[495-40-9]
2748.13	Benzophenone	[119-61-9]
2750.11	Valerophenone	[1009-14-9]
2752.12	Hexanophenone	[942-92-7]
2757.13	Heptanophenone	[1671-75-6]
2753.14	Octanophenone	[1674-37-9]

Organotin analysis

Organotin compounds are widely applied in the industry due to their antibacterial and fungicidal properties. Applications include preservation of wood, textiles, leather and paper, and as disinfectants. Due to their toxicity the use of trialkyltin compounds in marine antifoulding paints is restricted. The trialkyltin compounds are partly degraded to the di- and monoalkyltin derivatives.

Quantification of organotin compounds

The principle is based on alkylation of the organotin chlorides to tetrasubstituted compounds which are analyzed by GC and GC/MS.



As a unique source, Chiron offers standards for the derived analytes for use as calibration standards, in addition to the derivatizing agent and the common trialkyltin chloride pollutants.

Ethyl derivatives NEW

Analytes ethyl derivatives

1000µg/mL in isooctane; units: 1x1 mL, 5x1 mL

1886.14-K-IO Ethyltributyltin
2120.12-K-IO Di-n-butyl diethyltin
2119.10-K-IO Mono-n-butyl triethyltin

2491.20-K-IO Di-n-octyl diethyltin
2492.14-K-IO Mono-n-octyl triethyltin
2498.20-K-IO Ethyltricyclohexyltin

1887.20-K-IO Ethyltriphenyltin
2117.16-K-IO Diphenyl diethyltin
2118.12-K-IO Monophenyl triethyltin

Internal standards ethyl derivatives

1000µg/mL in isooctane; units: 1x1 mL, 5x1 mL

1955.11-K-IO Ethyltri-n-propyltin
2049.17-K-IO Ethyltri-n-pentyltin
2493.18-K-IO Di-n-heptyldiethyltin
2494.13-K-IO Mono-n-heptyltriethyltin

2023.13-Kit Ethylalkyl/Triaryltin Kit (13 compounds, 13 vials)

Tin chlorides

Analytes: common tin pollutants

1000µg/mL in isooctane or neat as listed

1981.12	Tri-n-butyltin chloride	1 g or 1000µg/mL, 5 mL
1982.8	Di-n-butyltin dichloride	1 g or 1000µg/mL, 5 mL
1983.4	Mono-n-butyltin trichloride	1 g or 1000µg/mL, 5 mL
1985.18	Triphenyltin chloride	1 g or 1000µg/mL, 5 mL
1986.12	Diphenyltin dichloride	1 g or 1000µg/mL, 5 mL
1987.6	Monophenyltin trichloride	1 g or 1000µg/mL, 5 mL
2487.8	Mono-n-octyltin trichloride	1 g or 1000µg/mL, 5 mL
2488.16	Di-n-octyltin dichloride	1 g or 1000µg/mL, 5 mL
2695.24	Tri-n-octyltin chloride	100 mg or 1000µg/mL, 5 mL
2489.18	Tricyclohexyltin chloride	1 g or 1000µg/mL, 5 mL

Internal standards

1000µg/mL in isooctane or neat as listed.

1989.9	Tri-n-propyltin chloride	1 g or 1000µg/mL, 5 mL
2490.12	Tetra-n-propyltin	1 g or 1000µg/mL, 5 mL
2050.15	Tri-n-pentyltin chloride	1 g or 1000µg/mL, 5 mL
2495.7	Mono-n-heptyltin trichloride	100 mg or 1000µg/mL, 5 mL
2496.14	Di-n-heptyltin dichloride	100 mg or 1000µg/mL, 5 mL

Derivatizing agent

1944.8-1MG	Sodium tetraethyl borate	1 g
2024.16-KIT	Organotin Analysis Kit (16 compounds, 16 vials)	

S-4335-K-IO
S-4335-K-5IO

Organotin Standard Mixture 1
Each 1000µg/mL in isooctane; units: 5x1mL or 5x5mL

Prod.No.	Compound	CAS No.
1983.4	Mono-n-butyltin trichloride	[1118-46-3]
1982.8	Di-n-butyltin dichloride	[683-18-1]
1987.6	Mono phenyltin trichloride	[1124-19-2]
1981.12	Tri-n-butyltin chloride	[1461-22-9]
1985.18	Triphenyltin chloride	[639-58-7]
1986.12	Diphenyltin dichloride	[1135-99-5]

International methods

For details and mixtures see the methods section

- ISO 17353:2004 Water Quality - Determination of selected organotin compound by GC
- ISO/DIS 23161.2:2007 Soil Quality - Determination of selected organotin compound gas chromatographic methods

For these important methods, see the Methods section, pages 32 and 38.

Phosphates

NEW

Organophosphate compound like those used in hydraulic fluids are belived to posses neurotoxic effect and causing organophosphate induced neuropsyhiatric disorder (COPIND). The potentially most toxic compounds are of the type tri-o-cresylphosphate (tri-o-tolylphosphate).

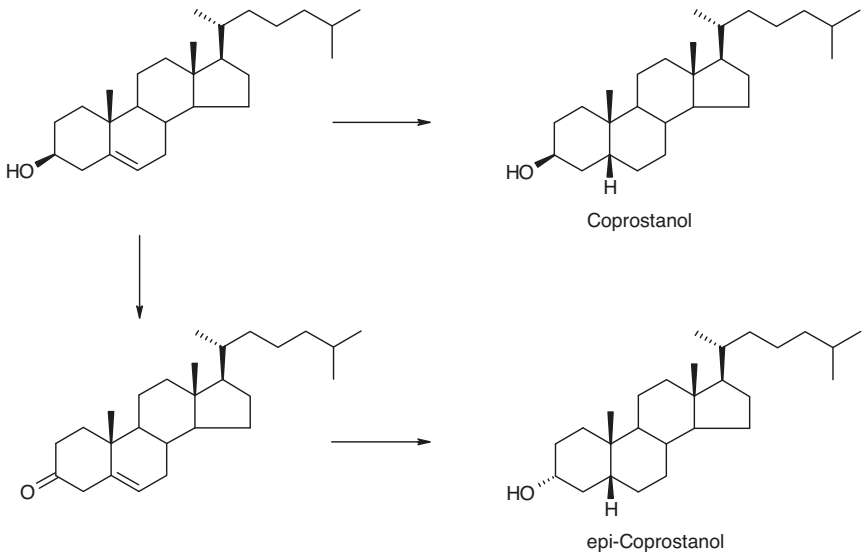
Native standards

Chiron No.	Compound		CAS No.	Concentration
1400.3-K-IO	Trimethyl phosphate	TMP	[512-56-1]	1000µg/mL
8026.6-K-IO	Triethyl phosphate		[78-40-0]	1000µg/mL
8027.9-K-IO	Tri-n-propyl phosphate		[513-08-6]	1000µg/mL
1399.12-K-IO	Tri-n-butyl phosphate	TBP (TnBP)	[126-73-8]	1000µg/mL
3966.12-K-IO	Triisobutyl phosphate	TiBP	[126-71-6]	1000µg/mL
2138.18-K-IO	Triphenyl phosphate	TPP	[115-86-6]	1000µg/mL
3967.19-K-IO	Tolyldiphenyl phosphate		[26444-49-5]	1000µg/mL
2135.21-K-IO	Tri-o-tolyl phosphate	ToTP	[78-30-8]	1000µg/mL
2134.21-K-IO	Tri-m-tolyl phosphate	TmTP	[563-04-2]	1000µg/mL
2136.21-K-IO	Tri-p-tolyl phosphate	TpTP	[78-32-0]	1000µg/mL
2137.21-K-IO	Tritolyl phosphate (isomer mix)	TTP	[1330-78-5]	1000µg/mL

NEW

Determination of the origin of faecal waste

Sewage waste analysis using faecal sterols



The deterioration of the water quality in rivers, lakes and coastal regions is a major challenge.
The use of sterol biomarker fingerprinting as an indicators of types of faecal input has been investigation and developed successfully over the past 25 years. This is an alternative to using microorganisms like E. Coli and Streptococci which have proven to be limited in their applications.
Coprostanol (5β(H)-cholestan-3β-ol) is one of the major sterols present in human faeces and is formed by bacterial reduction of cholesterol. A high value of epi-coprostanol (5β(H)-choletan-3α-ol) suggest older faecal contaminations. Stanols does not occur naturally in fresh and marine sediments. Herbivore faeces (from e.g. cows) typically have a high content of 24-ethylcoprosatnol, while algal input will have high levels sterols derived of typical algal sterols (e.g. ethylstigmastanol).
Ref: *Environ. Sci.Technol.* 2007,41,792-802 and references therein.

Internal standard

Cat No	Compound	CAS No.	Quantity
1197.24-10MG	5β(H)-Cholan-24-ol	[3110-99-4]	10mg
1197.24-25MG	5β(H)-Cholan-24-ol	[3110-99-4]	25mg

Ref.: Rhys Leming

Native standards

Cat No	Compound		CAS No.	Quantity
2900.27-10MG	Cholest-5-en-3β-ol	Cholesterol	[57-88-5]	10mg
	Cholest-5-en-3α-ol	epi-Cholestrol		Inquire
2795.27-10MG	5α(H)-Cholestan-3β-ol	Cholestanol	[80-97-7]	10mg
2731.27-10MG	5α(H)-Cholestan-3α-ol	epi-Cholestanol	[16720-60-8]	10mg
2351.27-10MG	5β(H)-Cholestan-3β-ol	Coprostanol	[360-68-9]	10mg
2730.27-10MG	5β(H)-Cholestan-3α-ol	epi-Coprostanol	[516-92-7]	10mg
3661.27-10MG	Cholest-4-ene-3-one		[601-57-0]	10mg
3624.27-10MG	5α(H)-Cholestan-3-one	Cholestanone	[15600-08-5]	10mg
2740.27-10MG	5β(H)-Cholestan-3-one	Coprostanone	[601-53-6]	10mg
2734.28-5MG	24-Methylcholesta-5,22E-dien-3β-ol	Brassicasterol	[474-67-9]	5mg
3767.29-10MG	24-Ethylcholest-5,22E-dien-3β-ol	Stigmasterol	[83-48-7]	10mg
	24-Ethylcholest-5,22E-dien-3α-ol	epi-Stigmasterol		Inquire
2732.29-10MG	24-Ethylcholest-5-en-3β-ol	β-Sitosterol	[83-46-5]	10mg
	24-Ethylcholest-5-en-3α-ol	epi- β-Sitosterol		Inquire
	24-Ethyl-5α(H)-cholest-22E-en-3β-ol			Inquire
	24-Ethyl-5α(H)-cholest-22E-en-3α-ol			Inquire
	24-Ethyl-5β(H)-cholest-22E-en-3β-ol			Inquire
	24-Ethyl-5β(H)-cholest-22E-en-3α-ol			Inquire
2717.29-10MG	24-Ethyl-5α(H)-cholestan-3β-ol	β-Sitostanol, Stigmastanol	[19466-47-8]	10mg
3768.29-10MG	24-Ethyl-5α(H)-cholestan-3α-ol	epi-β-Sitosterol		
	(24-ethylepicholestanol)	epi-Stigmastanol	19043-95-9]	10mg
3047.29-10MG	24-Ethylcoprostanol		[4736-91-8]	10mg
3582.29-10MG	24-Ethyl-5β(H)-cholestan-3α-ol	24-Ethyl-epi-coprostanol	[5060-24-2]	10mg
	24-Ethylcholesta-4,22E-dien-3-one	Stigmastadienone		Inquire

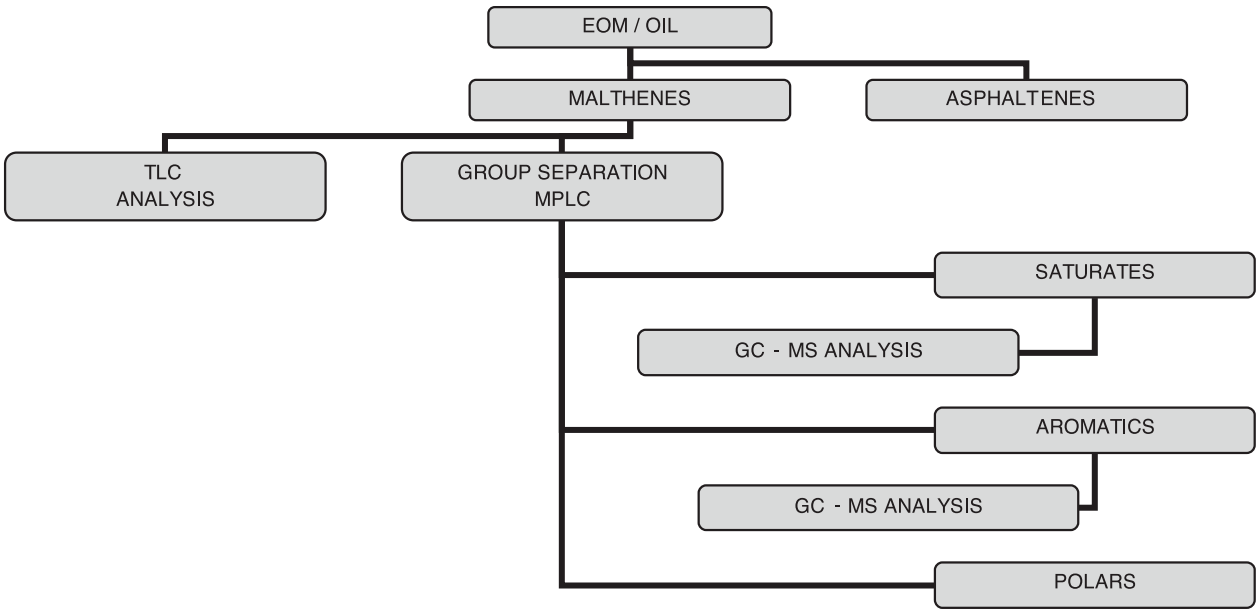
Chapter III-2: Petroleum applications

Table of contents

Geochemical analysis and petroleum exploration

Calibration mixtures and group separation General

The calibration mixtures described in this chapter are applicable for petroleum and organic geochemical analysis and are applicable to oil spill analysis and other types of petroleum and biomarker analysis. Recommendations made by "The Norwegian Industry Guide to Geochemical Analysis" (NIGOGA) are followed in the preparation of most of these products.



Analysis of oils and rocks using internal standards ISTD

The rock samples are extracted by Soxhlet extraction in dichloromethane-methanol mixture. The solvents are removed under vacuum, and the remaining extractable organic matter (EOM) is added to the required internal standard cocktail before further treatment. Similarly, the crude oil (or oil spill), topped or untopped, is added to the internal standard cocktail before deasphaltening. The deasphaltened sample is separated into saturated, aromatic and polar fractions by MPLC before a detailed GC and GC-MS analysis. In general, it is recommended to add the internal standards as early as possible in the process in order to account for experimental errors.

Internal standards (NIGOGA recommendations)

Chiron No.	Saturated Hydrocarbons	CAS No.
0652.30	Squalane	[111-01-3]
1019.12	n-Dodecane-d_{26}	[16416-30-1]
1020.16	n-Hexadecane-d_{34}	[15716-08-2]
1021.20	n-Eicosane-d_{42}	[62369-67-9]
1022.24	n-Tetracosane-d_{50}	[16416-32-3]

Chiron No.	Saturated Biomarkers	CAS No.
0641.24	5β(H)-Cholane	[80373-86-0]
0977.27	d_2 C27 ααα (20R) Cholestane	[122241-86-5]
0975.27	d_4 C27 ααα (20R) Cholestane	[205529-74-4]
0976.29	d_2 C29 ααα (20R) Ethylcholestane	
0974.29	d_4 C29 ααα (20R) Ethylcholestane	
0987.29	d_2 Nor-17β(H),21α(H)-hopane, d2 Isoadiantane	

Chiron No.	Aromatics	CAS No.
1313.10	1-Fluoronaphthalene, F-PAH®	[321-38-0]
2364.11	2-Fluoro-6-methylnaphthalene	[324-42-5]
2873.15	3-Fluoro-6-methylphenanthrene	[84194-32-2]
2364.11	2-Fluoro-6-methylnaphthalene, F-PAH®	[324-42-5]
1316.14	3-Fluorophenanthrene, F-PAH®	[440-40-4]
2873.15	3-Fluoro-6-methylphenanthrene, F-PAH®	[84194-32-2]
1318.16	1-Fluoropyrene, F-PAH®	[1691-65-2]
1712.12	4-Fluorobiphenyl, F-PAH®	[117044-44-7]
1329.18	2-Fluorochrysene, F-PAH®	
2872.19	9-Fluoro-5-methylchrysene	[64977-46-8]
2872.19	9-Fluoro-5-methylchrysene, F-PAH®	[64977-46-8]
0978.10	Naphthalene-d_8	[1146-65-2]
0387.11	1-Methylnaphthalene-d_{10}	[38072-94-5]
0388.12	1,8-Dimethylnaphthalene-d_{12}	[104489-29-4]
0389.14	Phenanthrene-d_{10}	[1517-22-2]
0329.16	Pyrene-d_{10}	[1718-52-1]
1086.12	Biphenyl-d_{10}	[1486-01-7]
1024.18	Chrysene-d_{12}	[1719-03-5]
0328.20	2,2´-Binaphthyl-d_{14}	[210487-05-1]

Chiron No.	Methyldibenzothiophenes	CAS No.
1692.12	2-Fluorodibenzothiophene, F-PASH	[1721-81-9]
0383.1	2-Dibenzothiophene-d_8	[33262-29-2]

Chiron No.	Aromatic Biomarkers	CAS No.
0983.21	d_3 C_{21} Monoaromatic sterane	[33262-29-2]
0986.28	d_3 $C_{28/C29}$ Monoaromatic sterane	
0984.20	d_2 C_{20} Triaromatic sterane	[205529-79-9]
0981.28	d_2 $C_{27/C28}$ Triaromatic sterane	[-/205529-81-3]
0985.28	d_2 C_{28} Triaromatic sterane	[205529-81-3]

Internal standard cocktails

S-4009-ASS-IO
S-4009-ASS-5IO

Routine Biomarker Internal Standard Cocktail 1

7 Analytes, each concentration as listed in isooctane; units: 10x1mL, 1x5mL, 5x5mL
Please inquire for other quantities.

Chiron No.	Name	CAS No.	Conc.
1019.12	n-Dodecane-d_{26}	[16416-30-1]	1000 µg/mL
1020.16	n-Hexadecane-d_{34}	[15716-08-2]	1000 µg/mL
0977.27	d_2 C_{27} Cholestane	[122241-86-5]	50 µg/mL
0978.10	Naphthalene-d_8	[1146-65-2]	100 µg/mL
0389.14	Phenanthrene-d_{10}	[1517-22-2]	100 µg/mL
0383.12	Dibenzothiophene-d_8	[33262-29-2]	100 µg/mL
0985.28	d_2 C_{28} Triaromatic Sterane	[205529-81-3]	25 µg/mL

S-4079-ASS-IO
S-4079-ASS-5IO

Routine Biomarker Internal Standard Cocktail 3

7 Analytes, each concentration as listed in isooctane; units: 10x1mL, 1x5mL, 5x5mL
Please inquire for other quantities.

Chiron No.	Name	CAS No.	Conc.
1019.12	n-Dodecane-d_{26}	[16416-30-1]	2000 µg/mL
1020.16	n-Hexadecane-d_{34}	[15716-08-2]	2000 µg/mL
0641.24	5β(H)-Cholane	[80373-86-0]	12 µg/mL
0978.10	Naphthalene-d_8	[1146-65-2]	24 µg/mL
1086.12	Biphenyl-d_{10}	[1486-01-7]	24 µg/mL
0389.14	Phenanthrene-d_{10}	[1517-22-2]	24 µg/mL
1024.18	Chrysene-d_{12}	[1719-03-5]	24 µg/mL

S-4121-ASS-IO
S-4121-ASS-5IO

Routine Biomarker Internal Standard Cocktail 4

7 Analytes, each concentration as listed in isooctane; units: 10x1mL, 1x5mL, 5x5mL
Please inquire for other quantities.

Chiron No.	Name	CAS No.	Conc.
1019.12	n-Dodecane-d_{26}	[16416-30-1]	2000 µg/mL
1020.16	n-Hexadecane-d_{34}	[15716-08-2]	2000 µg/mL
0641.24	5β(H)-Cholane	[80373-86-0]	12 µg/mL
1313.10	1-Fluoronaphthalene, F-PAH®	[321-38-0]	24 µg/mL
1712.12	4-Fluorobiphenyl, F-PAH®	[324-74-3]	24 µg/mL
1316.14	3-Fluorophenanthrene, F-PAH®	[440-40-4]	24 µg/mL
1329.18	2-Fluorochrysene, F-PAH®		24 µg/mL

S-4253-ASS-IO
S-4253-ASS-5IO

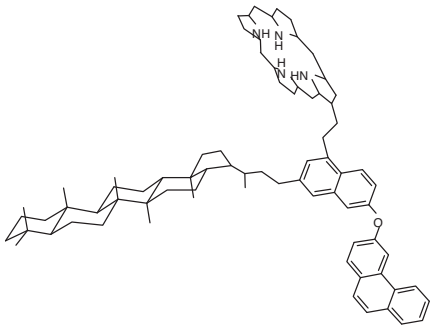
Routine Biomarker Internal Standard Cocktail 5

9 Analytes, each concentration as listed in isooctane; units: 10x1mL, 1x5mL, 5x5mL
Please inquire for other quantities.

Chiron No.	Name	CAS No.	Conc.
1019.12	n-Dodecane-d_{26}	[16416-30-1]	2000 µg/mL
1020.16	n-Hexadecane-d_{34}	[15716-08-2]	2000 µg/mL
0641.24	5β(H)-Cholane	[80373-86-0]	12 µg/mL
1313.10	1-Fluoronaphthalene, F-PAH®	[321-38-0]	24 µg/mL
1712.12	4-Fluorobiphenyl, F-PAH®	[324-74-3]	24 µg/mL

1316.14	3-Fluorophenanthrene, F-PAH®	[440-40-4]	24 µg/mL
1329.18	2-Fluorochrysene, F-PAH®		24 µg/mL
1692.12	2-Fluorodibenzothiophene, F-PASH	[177586-38-8]	24 µg/mL
0985.28	d_2 C_{28} Triaromatic Sterane	[205529-81-3]	12 µg/mL

Asphaltene precipitation ASP



Chiron offers technical services and expertise:

- Isolation and purification of asphaltene standards
- Separation by chromatography
- Asphaltene derivatization
- Characterization

The asphaltenes are the pentane/heptane insoluble components of the oil.
Asphaltenes are complex mixtures of unknown components, usually highly aromatised, and of high molecular weight. The quantity and the composition of asphaltenes from different sources vary a lot. Better knowlegde of the asphaltenes is important due to their practical and economical impact for the petroleum industry.

In most cases, the asphaltenes are not analysed, just weighed. For a more detailed asphaltene analysis, a number of methods can be applied.

Asphaltenes can be separated into groups according to polarity by chromatography, and they can be derivatized to simplify analysis.

Purified Asphaltenes is available on request.

Bulk composition of deasphalthened oils or rock extracts by TLC-FID TLC-FID

S-4101-ASS-5DC **Iatroscan Standard 1**

3 Analytes, each concentration as listed in dichloromethane; units: 1x5mL, 5x5mL

Chiron No.	Name	CAS No.	Conc.
0816.14	Phenanthrene	[85-01-8]	5 mg/15 mL
0652.30	Squalane	[111-01-3]	100 µL/15 mL
1711.10	1-Decanol	[112-30-1]	200 µL/15 mL

S-4105-ASS-5DC **Iatroscan Standard 2**

3 Analytes, each concentration as listed in dichloromethane; units: 1x5mL, 5x5mL

Chiron No.	Name	CAS No.	Conc.
0816.14	Phenanthrene	[85-01-8]	5 mg/15 mL
0652.30	Squalane	[111-01-3]	20 µL/15 mL
1711.10	1-Decanol	[112-30-1]	20 µL/15 mL

GC analysis of whole (depressurized) fluid and PIONA standards

WOGC

GC analysis of the whole fluid will provide the composition of the gasoline-range hydrocarbons. The oil is analysed by GC using a capillary column with a nonpolar stationary phase.

Quantitative whole oil standards

Procedural Requirements:

S-4018-1ML

Whole Oil Light Hydrocarbons C5-C8 by GC

Hydrocarbons C5-C8, Neat 1 mL, 28 components

Chiron No.	Name	CAS No.	Relative ratio (by weight):
1234.6	2,2-Dimethylbutane	[75-83-2]	3
1250.5	Cyclopentane	[287-92-3]	3
1233.6	2,3-Dimethylbutane	[79-29-8]	2
1235.6	2-Methylpentane	[107-83-5]	6
1236.6	3-Methylpentane	[96-14-0]	5
1232.6	n-Hexane	[110-54-3]	8
1237.7	2,2-Dimethylpentane	[590-35-2]	1
1249.6	Methylcyclopentane	[96-37-7]	3
1241.7	2,4-Dimethylpentane	[108-08-7]	1
1300.6	Benzene	[71-43-2]	3
1305.7	3,3-Dimethylpentane	[562-49-2]	1
1301.6	Cyclohexane	[110-82-7]	3
1238.7	2-Methylhexane	[591-76-4]	3
1239.7	2,3-Dimethylpentane	[565-59-3]	3
1302.7	1,1-Dimethylcyclopentane	[1638-26-2]	1
1257.7	3-Methylhexane	[589-34-4]	2
1252.7	cis-1,3-Dimethylcyclopentane	[2532-58-3]	0.3
1253.7	trans-1,3-Dimethylcyclopentane	[1759-58-6]	0.3
1255.7	3-Ethylpentane	[617-78-7]	2
1256.7	trans-1,2-Dimethylcyclopentane	[822-50-4]	0.3
1240.7	n-Heptane	[142-82-5]	8
1254.7	cis-1,2-Dimethylcyclopentane	[1192-18-3]	0.3
1248.7	Methylcyclohexane	[108-87-2]	7
1251.7	Ethylcyclopentane	[1640-89-7]	2
1264.7	Toluene	[108-88-3]	6
1242.8	n-Octane	[111-65-9]	8
1266.8	m-Xylene	[108-38-3]	3
1265.8	p-Xylene	[106-42-3]	2

For n-Paraffin mixtures, see S-4135 (page 181) and pages 186-190.

For PIONA mixtures, see pages 180-185.

Quantitative control standards (for integration and response factor control)

S-4011 **Whole Oil Quantitative Control Standards Set (S-4012+S-4013)**

S-4012 **Pristane/n-Heptadecane Control Standard**
Pristane/n-Heptadecane = 1:2
(1000μg Pristane and 2000μg n-Heptadecane in 1 mL isooctane)

S-4013 **Benzene/n-Hexane Control Standard**
Benzene/n-Hexane = 1:2 (Neat 1 mL)

Qualitative control standards (baseline separation control)

S-4014 **Whole Oil Separation Control Set (S-4015 - S-4017 + S-4012)**
Neat mixtures (0.25 mL) of the Control mixtures 1-3, 1 mL solution of the Control mixture 4 in isooctane solution

S-4015 **Whole Oil Control Mixture 1**

Chiron No.	Name	CAS No.	Relative ratios by weight:
1237.7	2,2-Dimethylpentane	[590-35-2]	0.5
1249.6	Methylcyclopentane	[96-37-7]	1.5
1241.7	2,4-Dimethylpentane	[108-08-7]	0.5

S-4016 **Whole Oil Control Mixture 2**

Chiron No.	Name	CAS No.	Relative ratios by weight:
1300.6	Benzene	[71-43-2]	1.5
1305.7	3,3-Dimethylpentane	[562-49-2]	0.15
1301.6	Cyclohexane	[110-82-7]	1.5

S-4017 **Whole Oil Control Mixture 3**

Chiron No.	Name	CAS No.	Relative ratios by weight:
1238.7	2-Methylhexane	[591-76-4]	1.5
1239.7	2,3-Dimethylpentane	[565-59-3]	1.5
1302.7	1,1-Dimethylcyclopentane	[1638-26-2]	0.5
1257.7	3-Methylhexane	[589-34-4]	1.0
1252.7	1,3-cis-Dimethylcyclopentane	[2532-58-3]	0.2
1253.7	1,3-trans-Dimethylcyclopentane	[1759-58-6]	0.2
1256.7	1,2-trans-Dimethylcyclopentane	[822-50-4]	0.2
1254.7	1,2-cis-Dimethylcyclopentane	[1192-18-3]	0.2

S-4012 **Whole Oil Control Mixture 4**
1000μg Pristane and 2000μg n-Heptadecane in 1 mL isooctane

GC analysis of the saturated hydrocarbon fraction — SAT GC

General

The GC analysis will provide quantitative information on the molecular composition of the saturated hydrocarbon fraction. Control Standards are available for baseline separation and integration control of the following parameters:

Pristane/n-C17 (Integration and baseline separation control)
n-C15/n-C20 (Integration control)
n-C30/n-C20 (Integration control)
n-C17/(n-C17+n-C27) (Integration control)

Quantitative control standards (for integration control)

S-4019-ASS-IO — **Saturated Fraction GC Control Set (S-4012 + S-4020)**

S-4012-ASS-IO — **Pristane/n-Heptadecane (Integration and baseline control)**
1000µg Pristane and 2000µg n-Heptadecane in 1 mL isooctane
Pristane/n-Heptadecane = 1:2

S-4020-ASS-IO — **n-C15/n-C20, Pentadecane/Eicosane (Integration control)**
1500 µg Pentadecane and 1000 µg Eicosane in 1 mL isooctane
n-Pentadecane/n-Eicosane = 3:2

S-4021-ASS-IO — **n-C30/n-C20, n-Triacontane/n-Eicosane (Integration control)**
1000 µg n-Triacontane and 2000 µg n-Eicosane in 1 mL isooctane
n-Triacontane/n-Eicosane = 1:2

S-4022-ASS-IO — **n-C17/(n-C17 + n-C27) (Integration control)**
2000 µg + 500 µg in isooctane solution in 1 mL isooctane
n-Heptadecane/n-Heptacosane = 4:1

S-4023-ASS-IO — **Saturated Fraction Integration and Separation**
Control Standard
6 Analytes, each concentration as listed in isooctane; unit: 1x1mL.

Chiron No.	Name	CAS No.	Conc. (mg/mL)
1135.15	n-Pentadecane (n-C15)	[629-62-9]	2
1137.17	n-Heptadecane (n-C17)	[629-78-7]	2
0635.19	Pristane	[1921-70-6]	1
1140.20	n-Eicosane (n-C20)	[112-95-8]	1
1147.27	n-Heptacosane (n-C27)	[593-49-7]	0,4
1150.30	n-Triacontane (n-C30)	[638-68-6]	0,3

S-4024-SET **CPI (1) Control Standards Set**

	S-4025 (mg/mL)	**S-4026** (mg/mL)	**S-4027** (mg/mL)
C22	1.0	1.0	1.0
C23	0.9	1.0	1.1
C24	0.8	0.8	0.8
C25	0.7	0.8	0.9
C26	0.6	0.6	0.6
C27	0.5	0.6	0.7
C28	0.4	0.4	0.4
C29	0.3	0.4	0.5
C30	0.2	0.2	0.2
CPI (1):	1.0	1.17	1.33

CPI (1) = 2(C23 + C25 + C27 + C29) / [C22 + 2(C24+C26+C28) + C30]

CPI (1) values significantly above or below (unusual) 1.0 indicate that the oil or extract is immature. Values of 1.0 suggest that the oil or extract is mature. Ref: The Biomarker Guide.

GC analysis of the aromatic fraction ARO GC

The GC analysis will provide a fingerprint of the hydrocarbon fraction. Molecular ratios are provided from the GC-MS data. To be analysed, the aromatic fraction is obtained by liquid chromatography of deasphalthened oil or EOM.

Single component standards available for GC-FID/GC-FPD of the aromatic fraction:

C2-C4 Naphthalenes:	C2	All possible isomers available
	C3	16 Isomers available
	C4	4 Isomers available:
		2-Butylnaphthalene 1261.14
		Eudalene 0737,14
		1,4,6,7-Tetramethylnaphthalene 0707.14
		1,2,5,6-Tetramethylnaphthalene 0167.14
C0-C4 Phenanthrenes	C0-C2	All possible C0-C2 isomers are available
	C3	9 Trimethyl and ethylmethyl isomers available
	C4	Five isomers available including:
		Retene 0794.18
		9-Butylphenanthrene 1026.18
		1,2,6,9-Tetramethylphenanthrene 0785.18
C0-C4 Dibenzothiophenes	C0-C1	All isomers available
	C2	11 Dimethyl- and ethyldibenzothiophenes
	C3	8 Trimethyl- and propyldibenzothiophenes
	C4	2- and 4-Butyldibenzothiophene

GC-MS analysis of oil, EOM or saturated hydrocarbon fraction

SAT/EOM GC-MS

The purpose of the GC-MS analysis is to obtain quantitative information on the biomarker composition.
It is recommended to monitor the following ions:

m/z	
177	Terpanes
191	Tri- and tetracyclic diterpanes, pentacyclic triterpanes
205	Pentacyclic hopanelike triterpanes, C31
217	Regular and rearranged steranes
218	Regular and rearranged steranes (mainly ββ)
231	4-Methylsteranes (mainly αα)
232	4-Methylsteranes (mainly ββ)
253	Monoaromatic steranes (not to be present)
259	Rearranged steranes (diasteranes)

Available standards

See the Compounds section for details, pages 246-273.

Quantitative NPD-standards

NPD = Naphthalene – Phenanthrene – Dibenzothiophene

S-4028-ASS-IO **Aromatic Fraction Peak Height Control Set (S-4029 + S-4030)**

S-4029-ASS-IO **1-Methylphenanthrene/Phenanthrene** = 1:2 (0,67)
1000 + 2000 µg/ml in isooctane, 1 mL pr. vial

S-4030-ASS-IO **C20 Triaromatic sterane** (0857,20)/
C26 Triaromatic sterane (0854,26) = 1:3 (0,33)
50 + 150 µg/mL in isooctane, 1 mL pr. vial

S-4032-ASS-IO **Methylphenanthrene Index Cocktail**
5 Analytes, each concentration as listed in isooctane; unit: 1x1mL

Chiron No.	Name	Cas.No	Relative ratios by weight:
0816.14	Phenanthrene	[85-01-8]	1.5
0813.15	3-Methylphenanthrene	[832-71-3]	1.0
0812.15	2-Methylphenanthrene	[2531-84-2]	1.0
0815.15	9-Methylphenanthrene	[883-20-5]	1.5
0811.15	1-Methylphenanthrene	[832-69-9]	1.0

MPI 1 = 1,5(2MP + 3MP) / (P + 1MP + 9MP)

MPI 2 = 3(2MP) / (P + 1MP + 9MP)

F 1 = (2MP + 3MP) / (2MP + 3MP + 9MP + 1MP)

S-4033-ASS-IO

Dibenzothiophene Cocktail

5 Analytes, each concentration as listed in isooctane; unit: 1x1mL

Chiron No.	Name	CAS No.	Relative ratios by weight:
0884.12	Dibenzothiophene	[132-65-0]	1.5
0887.13	4-Methyldibenzothiophene	[7372-88-5]	1.5
2499.13	3-Methyldibenzothiophene	[16587-52-3]	0.5
0886.13	2-Methyldibenzothiophene	[20928-02-3]	0.5
2501.13	1-Methyldibenzothiophene	[31317-07-4]	0.5

S-4034-ASS-IO

NPD* Cocktail

20 Analytes, each concentration as listed in isooctane; unit: 1x1mL

Chiron No.	Name	CAS No.	mg/mL in isooctane:
0712.11	1-Methylnaphthalene	[90-12-0]	0.5
0713.11	2-Methylnaphthalene	[91-57-6]	0.5
0722.12	1,3-Dimethylnaphthalene	[575-41-7]	0.5
0723.12	1,4-Dimethylnaphthalene	[571-58-4]	0.5
0724.12	1,5-Dimethylnaphthalene	[571-61-9]	0.5
0725.12	1,6-Dimethylnaphthalene	[575-43-9]	0.5
0726.12	1,7-Dimethylnaphthalene	[575-37-1]	0.5
0729.12	2,6-Dimethylnaphthalene	[581-42-0]	0.5
0731.12	2,7-Dimethylnaphthalene	[582-16-1]	0.5
0341.12	Biphenyl	[92-52-4]	0.5
0816.14	Phenanthrene	[85-01-8]	0.5
0811.15	1-Methylphenanthrene	[832-69-9]	0.25
0713.11	2-Methylphenanthrene	[91-57-6]	0.25
0813.15	3-Methylphenanthrene	[832-71-3]	0.25
0815.15	9-Methylphenanthrene	[883-20-5]	0.25
0884.12	Dibenzothiophene	[132-65-0]	0.25
2501.13	1-Methyldibenzothiophene	[31317-07-4]	0.1
0886.13	2-Methyldibenzothiophene	[20928-02-3]	0.1
2499.13	3-Methyldibenzothiophene	[16587-52-3]	0.1
0887.13	4-Methyldibenzothiophene	[7372-88-5]	0.1

For other NDP Cocktails: See the Environmental section, pages 143-147.

S-4122-ASS-IO

NPD Internal Standard Cocktail

3 Analytes, each concentration as listed in isooctane; units: 1x1mL, 5x1mL, 10x1mL

Chiron No.	Name	CAS No.	Cons.
1313.10	1-Fluoronaphthalene	[321-38-0]	1.0 mg/mL
1316.14	3-Fluorophenanthrene	[440-40-4]	0.5 mg/mL
1692.12	2-Fluorodibenzothiophene	[177586-38-8]	0.25 mg/mL

Common NPD hydrocarbons in oil

Naphthalenes/Phenanthrenes/Dibenzothiophenes, relative elution

Chiron No.*	Name	CAS No.	Label	m/z
0713.11-K-IO	2-Methylnaphthalene	[91-57-6]	2-MN	142
0712.11-K-IO	1-Methylnaphthalene	[90-12-0]	1-MN	142
0715.12-K-IO	2-Ethylnaphthalene	[939-27-5]	2-EN	156
0714.12-K-IO	1-Ethylnaphthalene	[1127-76-0]	1-EN	156
0729.12-K-IO	2,6-Dimethylnaphthalene	[581-42-0]	2,6-DMN	156
0731.12-K-IO	2,7-Dimethylnaphthalene	[582-16-1]	2,7-DMN	156
0722.12-K-IO	1,3-Dimethylnaphthalene	[575-41-7]	1,3-DMN	156
0726.12-K-IO	1,7-Dimethylnaphthalene	[575-37-1]	1,7-DMN	156
0725.12-K-IO	1,6-Dimethylnaphthalene	[575-43-9]	1,6-DMN	156
0728.12-K-IO	2,3-Dimethylnaphthalene	[581-40-8]	2,3-DMN	156
0723.12-K-IO	1,4-Dimethylnaphthalene	[571-58-4]	1,4-DMN	156
0724.12-K-IO	1,5-Dimethylnaphthalene	[571-61-9]	1,5-DMN	156
0721.12-K-IO	1,2-Dimethylnaphthalene	[573-98-8]	1,2-DMN	156
0170.13-500-IO	1,3,7-Trimethylnaphthalene	[2131-38-6]	1,3,7-TMN	170
not available	1,3,6-Trimethylnaphthalene		1,3,6-TMN	170
not available	1,3,5-Trimethylnaphthalene		1,3,5-TMN	170
0705.13-500-IO	1,4,6-Trimethylnaphthalene	[2131-42-2]	1,4,6-TMN	170
0441.13-500-IO	2,3,6-Trimethylnaphthalene	[829-26-5]	2,3,6-TMN	170
not available	1,6,7-Trimethylnaphthalene (=2,3,8)		1,6,7-TMN	170
not available	1,2,7-Trimethylnaphthalene		1,2,7-TMN	170
0703.13-500-IO	1,2,6-Trimethylnaphthalene	[3031-05-8]	1,2,6-TMN	170
0701.13-500-IO	1,2,4-Trimethylnaphthalene	[2717-42-2]	1,2,4-TMN	170
0702.13-500-IO	1,2,5-Trimethylnaphthalene	[641-91-8]	1,2,5-TMN	170
0816.14-K-IO	Phenanthrene	[85-01-8]	P	178
0813.15-K-IO	3-Methylphenanthrene	[832-71-3]	3-MP	192
0812.15-K-IO	2-Methylphenanthrene	[2531-84-2]	2-MP	192
0815.15-K-IO	9-Methylphenanthrene	[883-20-5]	9-MP	192
0811.15-K-IO	1-Methylphenanthrene	[832-69-9]	1-MP	192
not available	2-Ethylphenanthrene		2-EP	206
1028.16-K-IO	9-Ethylphenanthrene	[3674-75-7]	9-EP	206
0768.16-500-IO	3,6-Dimethylphenanthrene	[1576-67-6]	3,6-DMP	206
not available	1-Ethylphenanthrene		1-EP	206
0766.16-K-IO	2,6-Dimethylphenanthrene	[17980-16-4] / [33954-06-2]	2,6-DMP	206
0765.16-K-IO	2,7-Dimethylphenanthrene	[3674-66-6]/ [1576-69-8]/ [3674-69-9]	2,7-DMP	206
0766.16-K-IO	3,5-Dimethylphenanthrene	[17980-16-4] / [33954-06-2]	3,5-DMP	m/z
0876.16-500-IO	1,3-Dimethylphenanthrene	[16664-45-2]	1,3-DMP	142
0881.16-K-IO	2,10-Dimethylphenanthrene	[2479-54-3] / [23189-63-1]	2,10-DMP	142
0769.16-500-IO	3,9-Dimethylphenanthrene	[66291-32-5]	3,9-DMP	156
0882.16-500-IO	3,10-Dimethylphenanthrene	[66291-33-6]	3,10-DMP	156
0762.16-500-IO	1,6-Dimethylphenanthrene	[20291-74-1]	1,6-DMP	156
0765.16-K-IO	2,5-Dimethylphenanthrene	[3674-66-6]/ [1576-69-8] / [3674-69-9]	2,5-DMP	156
0767.16-K-IO	2,9-Dimethylphenanthrene	[17980-09-5] / [66291-34-7]	2,9-DMP	156

0761.16-K-IO	1,7-Dimethylphenanthrene	[66271-87-2]/ [483-87-4]	1,7-DMP	156
0879.16-K-IO	2,3-Dimethylphenanthrene	[3674-65-5]/ [66291-31-4]	2,3-DMP	156
0764.16-500-IO	1,9-Dimethylphenanthrene	[20291-73-0]	1,9-DMP	156
0767.16-K-IO	4,9-Dimethylphenanthrene	[17980-09-5] / [66291-34-7]	4,9-DMP	156
0881.16-K-IO	4,10-Dimethylphenanthrene	[2479-54-3]/ [23189-63-1]	4,10-DMP	156
0763.16-500-IO	1,8-Dimethylphenanthrene	[7372-87-4]	1,8-DMP	156
0794.16-500-IO	Retene	[483-65-8]	Retene	170
0884.12-500-IO	Dibenzothiophene	[132-65-0]	DBT	170
0887.13-500-IO	4-Methyldibenzothiophene	[7372-88-5]	4-MDBT	170
2799.13-5MG	3-Methyldibenzothiophene	[6587-52-3]	3-MDBT	170
0886.13-500-IO	2-Methyldibenzothiophene	[20928-02-3]	2-MDBT	170
2501.13-100-T	1-Methyldibenzothiophene	[31317-07-4]	1-MDBT	170

*Ref. the compounds section for details.

Ring C monoaromatic steroid hydrocarbons, m/z 253

Chiron No.	Name	Isomer	CAS No.
0861.21-100-IO	C21 Monoaromatic sterane	5α(H),10β(H)	[98774-59-5] / [98774-61-9]
0862.21-100-IO	C21 Monoaromatic sterane	5α(H),10β(H)	[98774-61-9] / [98774-59-5]
0858.27-100-IO	C27 Monoaroamtic sterane	5α(H),10β(H)	[98819-92-2] / [98819-91-1]
0858.27-100-IO	C27 Monoaromatic sterane	5α(H),10β(H)	[98819-92-2] / [98819-91-1]
0859.28-100-IO	C28 Monoaromatic sterane	5α(H),10β(H)	[102045-91-0] / [102045-92-1] / [81943-49-9] / [81943-51-3]
0859.28-100-IO	C28 Monoaromatic sterane	5α(H),10β(H)	[102045-91-0]/ [102045-92-1]/ [81943-49-9]/ [81943-51-3]
0860.29-100-IO	C29 Monoaromatic sterane	5α(H),10β(H)	[205176-21-2] / [81943-51-3]
0860.29-100-IO	C29 Monoaromatic sterane	5α(H),10β(H)	[205176-21-2] / [81943-51-3]

Ring ABC triaromatic steroid hydrocarbons, m/z 231

Chiron No.	Name	CAS No.
0857.20	C20 Triaromatic sterane	[81943-50-2]
0854.26	C26 Triaromatic sterane	[80382-29-2]
0855.27	C27 Triaromatic sterane	[80382-32-7] / [80382-33-8]
0856.28	C28 Triaromatic sterane	[80382-33-8]

Gas-chromatography isotope-ratio mass-spectrometry (GC-IRMS) analysis GC-IRMS

Cf. Pages 222 and 430-431.

References

NIGOGA 4, 2000 The Norwegian Industry Guide to Organic Geochemical Analysis, www.npd.no
The Biomarker Guide, Volume 1 and 2, Peters, K.E., Walters C.C., and Moldowan, J.M. Cambridge University Press 2005.

Petroleum analysis and petroleum products

Our petroleum standards are listed according to applications, in most cases with a reference to proposed international methods.
A complete list of individual compounds is found in the Compounds section, page 223 and onward.
Custom made "creative solutions" from any of the individual components are available on request and demand. Please inquire by fax or e-mail and state the requred analytes, concentrations and solvent(s).

PIONA, PONA, PNA analysis

The application of the mixtures is in the petrochemical industry for the quantitative and qualitative determination for components of complex mixtures of hydrocarbons.

The mixtures are used to determine retention times, indices, and monitor response factors of crude petroleum and refinery streams.

The PIONA mixtures are made for a complete analysis of paraffins, isoparaffins, olefines, naphthenes, and aromatics in petroleum.

P – Paraffins (n-paraffins, n-alkanes)
I – Isoparaffins (branched alkanes)
O – Olefines (alkenes, paraffins with one or several double bonds)
N – Naphthenes (saturated ring compounds, usually with alkyl substituents)
A – Aromatics (simple aromatics and alkyl substituted aromatics)

Whole oil quantitative standards, PIONA MIXTURES

S-4127 **PIONA Mixture 1, C5-C15**
135-140 n-paraffins, isoparaffins, olefins, naphthenes and aromatics
This standard is composed of the PIONA mixtures listed below (S-4135, S-4136, S-4137, S-4119 and S-4156).

Approximate weight percentage:

n-Paraffins	19%
Isoparaffins	19%
Olefins	18%
Naphthenes	20%
Aromatics	23%

The standard is supplied with a datasheet listing the weight % for each component in the formulation. The composition, as stated on the analytical certificate, may vary slightly from batch to batch.

Cost-effective PIONA-sets for routine applications are available on request.

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n-Paraffins
S-4135-01ML
S-4135-05ML

PIONA Mixture 1 - Paraffines

11 n-Paraffins with varying Wt% as listed below; units: 0.1mL, 0.5 mL neat.

Chiron No.	Name:	Wt.%	Chiron No.	Name:	Wt.%
1299.5	n-Pentane	13	1131.11	n-Undecane	7
1232.6	n-Hexane	12	1132.12	n-Dodecane	7
1240.7	n-Heptane	12	1133.13	n-Tridecane	7
1242.8	n-Octane	11	1134.14	n-Tetradecane	7
1245.9	n-Nonane	10	1135.15	n-Pentadecane	6
1875.10	n-Decane	8			

A number of other n-alkane standards are supplied as specified below, page 186.

Isoparaffins
S-4136-01ML
S-4136-05ML

PIONA Mixture 1 - Isoparaffines

37 Isoparaffins with varying Wt.% as listed below; units: 0.1 mL, 0.5 mL neat.

Chiron No.	Name:	Wt.%	Chiron No.	Name:	Wt.%
1231.5	I2-Methylbutane	2.6	1872.8	3-Methylheptane	3.8
1233.6	2,3-Dimethylbutane	1.4	1255.7	3-Ethylheptane	2.9
1235.6	2-Methylpentane	4.4	2985.8	2,5-Dimethylheptane	3.1
1236.6	3-Methylpentane	3.2	2996.9	3,5-Dimethylheptane (D)	0.4
1237.7	2,2-Dimethylpentane	4.2	2994.9	3,3-Dimethylheptane	3.3
1241.7	2,4-Dimethylpentane	3.1	2996.9	3,5-Dimethylheptane (L)	0.4
3853.7	2,2,3-Trimethylbutane	3.1	2991.9	2,3-Dimethylheptane	1.5
1305.7	3,3-Dimethylpentane	1.3	2995.9	3,4-Dimethylheptane (D)	1.7
1238.7	2-Methylhexane	3.6	2995.9	3,4-Dimethylheptane (L)	2.0
1239.7	2,3-Dimethylpentane	1.6	0958.9	2-Methyloctane	5.1
1257.7	3-Methylhexane	4.5	0963.9	3-Methyloctane	2.7
1255.7	3-Ethylpentane	1.6	3856.9	3,3-Diethylpentane	3.3
2986.8	2,2-Dimethylhexane	1.4	3854.10	2,2-Dimethyloctane	3.1
2985.8	2,5-Dimethylhexane	3.2	3009.10	3,3-Dimethyloctane	1.7
3855.8	2,2,3-Trimethylpentane	3.2	3005.10	2,3-Dimethyloctane	1.6
2984.8	2,4-Dimethylhexane	1.6	0959.10	2-Methylnonane	3.3
2983.8	2,3-Dimethylhexane	1.4	3857.10	3-Ethyloctane	3.3
1243.8	2-Methylheptane	4.6	0964.10	3-Methylnonane	3.4
1873.8	4-Methylheptane	3.4			

A number of other n-alkane/isoalkane standards are supplied as specified below, page 186.

Olefins

S-4137-01ML
S-4137-05ML

PIONA Mixture 1 - Olefins

25 Olefins with varying Wt.% as listed below; units: 0.1 mL, 0.5 mL neat

Chiron No.	Name:	Wt.%	Chiron No.	Name:	Wt.%
3019.5	3-Methyl-1-butene	2.0	3026.7	cis-3-Heptene	5.0
3015.5	1-Pentene	4.0	3025.7	trans-2-Heptene	2.5
2643.5	2-Methyl-1-butene	1.5	3024.7	cis-2-Heptene	4.5
3038.5	2-Methyl-1,3-butadiene	2.5	2648.8	1-Octene	8.0
3017.5	trans-2-Pentene	4.0	3029.8	trans-2-Octene	2.0
3016.5	cis-2-Pentene	2.0	3028.8	cis-2-Octene	5.0
2651.6	4-Methyl-1-pentene	4.0	2645.9	1-Nonene	9.0
2649.6	1-Hexene	7.5	3034.9	trans-3-Nonene	2.0
3021.6	trans-2-Hexene	2.0	3033.9	cis-3-Nonene	2.0
2681.6	2-Methyl-2-pentene	4.0	3032.9	trans-2-Nonene	2.0
3020.6	cis-2-Hexene	3.0	3031.9	cis-2-Nonene	2.0
2684.7	1-Heptene	9.0	2642.10	1-Decene	8.0
3027.7	trans-3-Heptene	2.5			

A number of other olefin standards are supplied according to ASTM methods specified below and in the Methods section, page 45 and onward.

Naphthenes

S-4119-01-ML
S-4119-05ML

PIONA Mixture 1 - Naphthenes

30 Naphthenes with varying Wt.% as listed below; units: 0.1 mL, 0.5 mL neat

Chiron No.	Name:	Wt.%	Chiron No.	Name:	Wt.%
1250.5	Cyclopentane	5.0	3988.8	ccc-1,2,3-Trimethylcyclopentane	1.0
1249.6	Methylcyclopentane	5.0	3989.8	Isopropylcyclopentane	2.5
1248.7	Cyclohexane	5.5	1867.8	cis-1,2-Dimethylcyclohexane	3.5
1302.7	1,1-Dimethylcyclopentane	3.5	3990.8	n-Propylcyclopentane	2.5
1252.7	cis-1,3-Dimethylcyclopentane	1.0	3991.9	ccc-1,3,5-Trimethylcyclohexane	3.0
1256.7	trans-1,2-Dimethylcyclopentane	2.5	3992.9	1,1,4-Trimethylcyclohexane	4.0
1253.7	trans-1,3-Dimethylcyclopentane	3.0	3993.9	ctt-1,2,4-Trimethylcyclohexane	2.5
1248.7	Methylcyclohexane	7.5	3994.9	ctc-1,2,4-Trimethylcyclohexane	3.5
1251.7	Ethylcyclopentane	2.5	3995.9	1,1,2-Trimethylcyclohexane	3.5
3984.8	ctc-1,2,3-Trimethylcyclopentane	2.5	3996.9	Isobutylcyclopentane	3.5
3985.8	cct-1,2,4-Trimethylcyclopentane	3.5	3997.9	Isopropylcyclohexane	4.5
3986.8	ctc-1,2,4-Trimethylcyclopentane	2.5	3998.9	n-Butylcyclopentane	3.5
1866.8	trans-1,4-Dimethylcyclohexane	3.5	3999.10	Isobutylcyclohexane	4.5
3987.8	1-Ethyl-1-methylcyclopentane	1.5	8000.10	t-1-Methyl-2-propylcyclohexane	4.0
1868.8	trans-1,2-Dimethylcyclohexane	2.5	8001.10	t-1-Methyl-2-(4MP)cyclopentane	2.5

A number of other naphthene standards are specified below or supplied according to ASTM methods specified below and in the Methods section, page 45 and onward.

Aromatics

S-4156-01ML
S-4156-05ML

PIONA Mixture 1 - Aromatics

37 Aromatics with varying Wt.% as listed below; units: 0.1 mL, 0.5 mL neat

Chiron No.	Name:	Wt.%	Chiron No.	Name:	Wt.%
1300.6	Benzene	3.1	1268.8	Ethylbenzene	1.6
1264.7	Toluene	4.6	1266.8	m-Xylene	2.9
1267.8	o-Xylene	3.2	1265.8	p-Xylene	3.0
2155.9	Isopropylbenzene	3.1	0392.10	n-Butylbenzene	2.9
1298.9	n-Propylbenzene	1.7	2172.10	1,2-Diethylbenzene	3.1
1273.9	1-Methyl-3-ethylbenzene	2.9	2345.10	1-Methyl-2-n-propylbenzene	1.5
1272.9	1-Methyl-4-ethylbenzene	3.2	2340.10	1,4-Dimethyl-2-ethylbenzene	3.0
1269.9	1,3,5-Trimethylbenzene	3.5	2339.10	1,3-Dimethyl-5-ethylbenzene	1.3
2156.10	1-Methyl-2-ethylbenzene	4.5	2338.10	1,2-Dimethyl-4-ethylbenzene	2.7
1270.9	1,2,4-Trimethylbenzene	4.3	2330.10	1,3-Dimethyl-2-ethylbenzene	2.7
2343.10	tert-Butylbenzene	2.7	2337.10	1,2-Dimethyl-3-ethylbenzene	3.0
2342.10	Isobutylbenzene	0.9	2158.10	1,2,4,5-Tetramethylbenzene	2.0
2341.10	sec-Butylbenzene	1.5	2331.11	2-Methylbutylbenzene	1.4
2328.10	1-Methyl-3-isopropylbenzene	1.4	2336.11	n-Pentylbenzene	1.5
0924.10	1-Methyl-4-isopropylbenzene	2.8	2332.12	t-1-Butyl-3,5-dimethylbenzene	3.0
2329.10	1-Methyl-2-isopropylbenzene	2.7	2333.12	t-1-Butyl-4-ethylbenzene	3.0
2346.10	1-Methyl-3-n-propylbenzene	3.2	2335.12	1,3,5-Triethylbenzene	2.0
2347.10	1-Methyl-4-n-propylbenzene	1.5	2334.12	1,2,4-Triethylbenzene	3.1
0393.12	n-Hexylbenzene	4.7			

A number of other aromatic standards are specified below or supplied according to ASTM methods specified below and in the Methods section, page 45 and onward.

S-4018-1ML

PIONA Mixture 2, C5-C8

(See also Whole Oil Light Hydrocarbons C5-C8 by GC,
S-4018 Quantitative Whole Oil Standard, page 172)
Hydrocarbons C5-C8, Neat 1 ml, 28 n-Paraffins, isoparaffins, olefins, naphthenes, and aromatics. For a detailed composition, see page 172.

Approximate weight percentage:

n-Paraffins	28 %
Isoparaffins	33 %
Naphthenes	23 %
Aromatics	16 %

The standard is a custom made mixture for the analysis of light hydrocarbons. The standard is supplied with a datasheet listing the weight% for each component in the formulation.

S-4067-1ML

PIONA Mixture 3, C5-C25

Hydrocarbons C5-C25, 1 ml neat,
n-paraffins, isoparaffins, olefins, naphthenes, and aromatics.

Prod.no.	Compound	CAS no.	Purity	Weight %
8030.5	Isopentane	[78-78-4]	99+%	3.00
1299.5	n-Pentane	[109-66-0]	99+%	3.98
1250.5	Cyclopentane	[287-92-3]	99 %	1.52
1233.6	2,3-Dimethylbutane	[75-83-2]	99 %	1.01
1235.6	2-Methylpentane	[107-83-5]	99+%	3.00
1236.6	3-Methylpentane	[96-14-0]	99+%	2.50
1232.6	n-Hexane	[110-54-3]	99 %	4.29
1237.7	2,2-Dimethylpentane	[590-35-2]	99.9 %	0.51
1249.6	Methylcyclopentane	[96-37-7]	99 %	1.52
1241.7	2,4-Dimethylpentane	[108-08-7]	99 %	0.51
1300.6	Benzene	[71-43-2]	99.9 %	1.53
1301.6	Cyclohexane	[110-82-7]	99.5 %	1.50
1238.7	2-Methylhexane	[591-76-4]	98 %	1.51
1239.7	2,3-Dimethylpentane	[565-59-3]	99 %	1.52
1302.7	1,1-Dimethylcyclopentane	[1638-26-2]	99 %	0.50
1257.7	3-Methylhexane	[589-43-4]	99 %	1.00
1252.7	1,3-cis-Dimethylcyclopentane	[2532-58-3]	99.8 %	0.22
1253.7	1,3-trans-Dimethylcyclopentane	[1759-58-6]	99 %	0.22
1255.7	3-Ethylpentane	[617-78-7]	98 %	1.01
0443.8	2,2,4-Trimethylpentane	[540-84-1]	99.5 %	2.99
1240.7	n-Heptane	[142-82-5]	99 %	3.98
1248.7	Methylcyclohexane	[108-87-2]	99 %	3.48
1251.7	Ethylcyclopentane	[1640-89-7]	99.7 %	1.00
1264.7	Toluene	[108-88-3]	99.5 %	2.98
1243.8	2-Methylheptane	[592-27-8]	99 %	1.49
1242.8	n-Octane	[111-65-9]	99 %	3.98
1258.8	Ethylcyclohexane	[1678-91-7]	99 %	1.50
1246.9	2,6-Dimethylheptane	[1072-05-5]	99 %	1.29
1259.9	1,1,3-Trimethylcyclohexane	[3073-66-3]	99 %	1.10
1268.8	Ethylbenzene	[100-41-4]	99 %	0.99
1266.8	m-Xylene	[108-38-3]	99 %	1.61
1265.8	p-Xylene	[106-42-3]	99 %	1.12
0963.9	3-Methyloctane	[2216-33-3]	99 %	1.50
1267.8	o-Xylene	[95-47-6]	99 %	1.40
1245.9	n-Nonane	[111-84-2]	99 %	4.96
1298.9	Propylbenzene	[103-65-1]	98 %	0.32
1273.9	1-Ethyl-3-methylbenzene	[620-14-4]	99 %	1.10
1272.9	1-Ethyl-4-methylbenzene	[622-96-8]	99 %	0.43
1271.9	1,3,5-Trimethylbenzene	[108-67-8]	98+%	0.60
1270.9	1,2,4-Trimethylbenzene	[95-63-6]	98 %	1.29
0413.10	n-Decane	[124-18-5]	99 %	4.96
1274.9	1,2,3-Trimethylbenzene	[526-73-8]	99 %	0.80
1131.11	n-Undecane	[1120-21-4]	99 %	5.01

Approximate weight percentage:

n-Paraffins	50 %
Isoparaffins	23 %
Naphthenes	13 %
Aromatics	14 %

The standard is a custom made mixture for the analysis of whole oil hydrocarbons. This standard is supplied with a datasheet listing the molecular weights, the densities, the purity of each component (normally 99+%), and the relative retention times on a Varian CP-Sil PONA CB column.

S-4128-500MG

PIONA Mixture 4
Hydrocarbon Test Mixture, ASTM D 5443
28 Analytes with varying Wt% as listed below; unit: 500 mg neat

Chiron No.	Name	Wt.%	Chiron No.	Name	Wt.%
1250.5	Cyclopentane	1.0	1875.10	n-Decane	4.5
1299.5	n-Pentane	1.0	1131.11	n-Undecane	3.5
1301.6	Cyclohexane	2.0	1132.12	n-Dodecane	3.0
1233.6	2,3-Dimethylbutane	2.0	1300.6	Benzene	2.5
1232.6	n-Hexane	2.0	1264.7	Toluene	2.0
2649.6	1-Hexene	1.5	0718.10	trans-Decahydronaphthalene	4.0
1248.7	Methylcyclohexane	4.5	1134.14	n-Tetradecane	4.5
3971.7	4-Methyl-1-hexene	1.5	1268.8	Ethylbenzene	4.5
1240.7	n-Heptane	3.5	1267.8	o-Xylene	4.0
1867.8	cis-1,2-Dimethylcyclohexane	5.0	1298.9	n-Propylbenzene	5.0
1201.10	Isooctane	5.0	1270.9	1,2,4-Trimethylbenzene	4.5
1242.8	n-Octane	5.0	1274.9	1,2,3-Trimethylbenzene	5.0
3974.9	1cis,2cis,4-Trimethylcyclohexane	4.5	2158.10	1,2,4,5-Tetramethylbenzene	5.0
1245.9	n-Nonane	4.5	2159.11	Pentamethylbenzene	5.0

S-4147-1ML

Calibration Standard ASTM D 3710
16 Analytes, each Wt.% as listed; units: 1x1mL, 5x1 mL neat

This standard can be used for qualitative and quantitative analysis.

Chiron No.	Name	Wt.%	Chiron No.	Name	Wt.%
1231.5	2-Methylbutane	10.0	1265.8	p-Xylene	13.0
1299.5	n-Pentane	8.0	1298.9	n-Propylbenzene	5.0
1235.6	2-Methylpentane	6.0	1875.10	n-Decane	4.0
1232.6	n-Hexane	6.0	0392.10	n-Butylbenzene	4.0
1241.7	2,4-Dimethylpentane	6.0	1132.12	n-Dodecane	3.5
1240.7	n-Heptane	10.0	1133.13	n-Tridecane	2.5
1264.7	Toluene	11.0	1134.14	n-Tetradecane	2.5
1242.8	n-Octane	6.0	1135.15	n-Pentadecane	2.5

Other n-paraffins mixes

Chiron offers different paraffin mixtures specially made to suit our customers requirements. Different variations are possible. Please inquire by fax or by e-mail. In addition to the neat mixture S-4136 above, the following solutions and neat mixtures are available:

S-4066-K-IO	**n-Alkanes C14-C32 (even + pristane/phytane)** 12 Analytes, each 1000 µg/mL in isooctane; units: 1x1mL, 5x1mL, 10x1mL This standard includes all the even n-paraffins + pristane and phytane.
S-4108-100-CY	**n-Alkanes C10-C40 (even)** 12 Analytes, each 100µg/ml in cyclohexane; units: 1x1mL, 5x1mL, 10x1mL This standard includes all the even n-paraffins.
S-4106-100-CY	**n-Alkanes C10-C40 (even + pristane/phytane)** 18 Analytes, each 100µg/ml in cyclohexane; units: 1x1mL, 5x1mL, 10x1mL This standard includes all the even n-paraffins + pristane and phytane.
S-4109-100-CY	**n-Alkanes C10-C40 (even and uneven)** 31 Analytes, each 100µg/mL in cyclohexane; units: 1x1mL, 5x1mL, 10x1mL This standard includes all the n-paraffins C10-C40.
S-4110-100-CY	**n-Alkanes C10-C40 (all +pristane/phytane)** 33 Analytes, each 100µg/mL in cyclohexane; units: 1x1mL, 5x1mL, 10x1mL This standard includes all the n-paraffins C10-C40 + pristane and phytane.
S-4348-K-IO	**n-Alkanes C20-C34, all even + pristane/phytane,** 10 Analytes, each 1000µg/mL in isooctane; units: 1x1mL, 5x1mL
S-4407-2K-CY	**n-Alkanes C10-C36 (C10,12,16,20,24,25,28,32,34,35,36),** 11 Analytes, each 2000µg/mL in cyclohexane; unit: 1x1mL
S-4425-100-CY	**n-Alkanes C8-C26, all even and uneven,** 19 analytes, each 100µg/mL in cyclohexane; unit: 1x10mL screw cap bottle
S-4435-100-IO S-4435-K-IO	**n-Alkanes C10-C25, all even and uneven,** 11 analytes, each 100µg/mL or 1000µg/mL in isooctane; units: 1x1mL, 5x1mL, 10x1mL
S-4350-5K-DC	**Deuterated n-Alkane Mixture 2 (C8,12,16,36),** 4 analytes, each 5000µg/mL in dichloromethane; unit: 1x10mL screw cap bottle
S-4437-K-IO	**Deuterated n-Alkane Mixture 3 (C12,16,20,24,30,32,36),** 7 analytes, each 1000µg/mL in isooctane; unit: 1x1mL

S-4075-100-5DC
S-4075-100-10DC

n-Alkanes C10-C40 (even + some uneven)

24 Analytes, each 100μg/mL in dichloromethane; units: 1x5mL, 1x10mL in screw-capped bottle. This standard includes all the even n-paraffins C10-C40 + extra addition of some uneven n-paraffins C10-C40.

C10	C17	C22	C27	C36
C12	C18	C23	C28	C40
C14	C19	C24	C30	Pristane
C15	C20	C25	C32	Phytane
C16	C21	C26	C34	

S-4108-50-PE
S-4108-50-5PE

ISO 9377-2 Standard Mixture of n-Alkanes C10-C40 (all even)

Determination of Hydrocarbon Oil in Water Index
16 Analytes, each 50 μg/mL in n-Pentane; units: 1x1mL, 1x5 mL, 10x1mL

S-4108-100-CY
S-4108-100-5CY

This standard is also available as 100μg/mL in Cyclohexane
Units: 1x1mL, 1x5 mL, 10x1mL

S-4107-50-PE
S-4107-50-5PE

ISO 9377-2 Standard Mixture of n-Alkanes C20-C40 (all even)

Determination of Hydrocarbon Oil in Water Index
11 Analytes, each 50μg/mL in n-Pentane; units: 1x1mL, 1x5mL, 10x1mL

S-4107-50-HX
S-4170-50-5HX

This standard is also available as 50μg/mL in n-hexane; units 1x1mL, 1x5mL, 10x1mL
Use this standard for system performance evaluation.

S-4424-50-PE
S-4424-50-5PE

ISO 9377-2 Mod Standard Mixture of n-Alkanes + BTEX II
C7+C8+C9+C10+C20+C40+BTEX in n-Pentane

Determination of Hydrocarbon Oil in Water Index
10 Analytes, each 50 μg/mL in n-pentane; units: 1x1mL, 1x5 mL, 10x1mL

Chiron No.	Name		Chiron No.	Name	
1300.6	Benzene	B	1240.7	n-Heptane	C7
1264.7	Toluene	T	1242.8	n-Octane	C8
1268.8	Ethylbenzene	E	1245.9	n-Nonane	C9
1267.8	o-Xylene	o-X	1875.10	n-Decane	C10
1266.8	m-Xylene	m-X	1140.20	n-Eicosane	C20
1265.8	p-Xylene	p-X	1160.40	n-Tetracontane	C40

S-4395-50-PE
S-4395-50-5PE

ISO 9377-2 Mod Standard Mixture of n-Alkanes + BTEX III
C7+C8+C9+C10-C40 (all even)+BTEX in n-Pentane

Determination of Hydrocarbon Oil in Water Index
25 Analytes, each 50 μg/mL in n-pentane; units: 1x1mL, 1x5mL, 10x1mL

Chiron No.	Name		Chiron No.	Name	
1300.6	Benzene	B	1138.18	n-Octadecane	C18
1264.7	Toluene	T	1140.20	n-Eicosane	C20
1268.8	Ethylbenzene	E	1142.22	n-Docosane	C22
1267.8	o-Xylene	o-X	1144.24	n-Tetracosane	C24
1266.8	m-Xylene	m-X	1146.26	n-Hexacosane	C26
1265.8	p-Xylene	p-X	1148.28	n-Octacosane	C28
1240.7	n-Heptane	C7	1150.30	n-Triacontane	C30

1242.8	n-Octane	C8	1152.32	n-Dotriacontane	C32
1245.9	n-Nonane	C9	1154.34	n-Tetratriacontane	C34
1875.10	n-Decane	C10	1156.36	n-Hexatriacontane	C36
1132.12	n-Dodecane	C12	1158.38	n-Octatriacontane	C38
1144.24	n-Tetradecane	C14	1160.40	n-Tetracontane	C40
1136.16	n-Hexanedecane	C16			

S-4112-100MG
S-4112-1G

Petrochemical Calibration Mixture C6-C44, ASTM D 2887 and D 6352

18 Analytes, each 6.25 Wt.% in carbon disulfide (CS2); units: 1x100mg, 1x1g neat.

Use for determining column resolution as well as for quantitative analysis.

Chiron No.	Name		Chiron No.	Name	
1232.6	n-Hexane	C6	1138.18	n-Octadecane	C18
1240.7	n-Heptane	C7	1140.20	n-Eicosane	C20
1242.8	n-Octane	C8	1144.24	n-Tetracosane	C24
1245.9	n-Nonane	C9	1148.28	n-Octacosane	C28
1875.10	n-Decane	C10	1152.32	n-Dotriacontane	C32
1131.11	n-Undecane	C11	1156.36	n-Hexatriacontane	C36
1132.12	n-Dodecane	C12	1160.40	n-Tetracontane	C40
1134.14	n-Tetradecane	C14	1247.44	n-Tetratetracontane	C44
1136.16	n-Hexadecane	C16			

S-4149-500-MX
S-4149-500-5MX

Hydrocarbon Window Defining Standard C8-C40, ASTM D-2887 and D 6352

35 Analytes, each 500 μg/mL in CS2:CH2Cl2 (3:1); units: 1x1mL, 1x5mL

Chiron No.	Name		Chiron No.	Name	
1242.8	Octane	C8	1144.24	Tetracosane	C24
1245.9	Nonane	C9	1145.25	Pentacosane	C25
1875.10	Decane	C10	1146.26	Hexacosane	C26
1131.11	Undecane	C11	1147.27	Heptacosane	C27
1132.12	Dodecane	C12	1148.28	Octacosane	C28
1133.13	Tridecane	C13	1149.29	Nonacosane	C29
1134.14	Tetradecane	C14	1150.30	Triacontane	C30
1135.15	Pentadecane	C15	1151.31	n-Hentriacontane	C31
1136.16	Hexadecane	C16	1152.32	Dotriacontane	C32
1137.17	Heptadecane	C17	1153.33	Tritriacontane	C33
1138.18	Octadecane	C18	1154.34	Tetratriacontane	C34
0635.19	Pristane	C19	1155.35	Pentatriacontane	C35
1139.19	Nonadecane	C19	1156.36	Hexatriacontane	C36
0629.20	Phytane	C20	1157.37	Heptatriacontane	C37
1140.20	Eicosane	C20	1158.38	Octatriacontane	C38
1141.21	Heneicosane	C21	1159.39	Nonatriacontane	C39
1142.22	Docosane	C22	1160.40	Tetracontane	C40
1143.23	Tricosane	C23			

Simulated distillation standard — SIM DIS

Simulated Distillation (SIM DIS) and Proposed Motor Oil Volatility Method.
The standard can be used for normal temperature analytical requirements when generating boiling point versus retention time calibration curves.

S-4211-5ML

Stock SIM DIS Paraffin Solution (C5-C18)

14 Analytes, each Wt.% as listed; unit: 1x5 mL neat

Chiron No.	Name	Wt.%	Chiron No.	Name	Wt.%
1299.5	n-Pentane	6.66	1132.12	n-Dodecane	13..33
1232.6	n-Hexane	6.66	1134.14	n-Tetradecane	6.66
1240.7	n-Heptane	6.66	1135.15	n-Pentadecane	6.66
1242.8	n-Octane	6.66	1136.16	n-Hexadecane	6.66
1245.9	n-Nonane	6.66	1137.17	n-Heptadecane	6.66
1875.10	n-Decane	6.66	1138.18	n-Octadecane	6.66
1131.11	n-Undecane	6.66	1140.20	n-Eicosane	6.66

S-4152-100-CY

Quantitative Linearity Wax Mixture C16-C44, ASTM D 5442

12 Analytes, each 0.01 Wt. % in Cyclohexane; units: 1x1mL, 5x1mL

Chiron No.	Name		Chiron No.	Name	
1136.16	n-Hexadecane	C16	1148.28	n-Octacosane	C28
1138.18	n-Octadecane	C18	1150.30	n-Triacontane	C30
1140.20	n-Eicosane	C20	1152.32	n-Dotriacontane	C32
1142.22	n-Docosane	C22	1156.36	n-Hexatriacontane	C36
1144.24	n-Tetracosane	C24	1160.40	n-Tetracontane	C40
1146.26	n-Hexacosane	C26	1247.44	n-Tetratetracontane	C44

S-4139-500MG

Retention Time Wax Mixture C16-C44, ASTM D 5542

12 Analytes, each 8.3 Wt. %; unit: 1x500mg neat

Use this standard to establish the retention times from C16 to C44.

Chiron No.	Name		Chiron No.	Name	
1136.16	n-Hexadecane	C16	1148.28	n-Octacosane	C28
1138.18	n-Octadecane	C18	1150.30	n-Triacontane	C30
1140.20	n-Eicosane	C20	1152.32	n-Dotriacontane	C32
1142.22	n-Docosane	C22	1156.36	n-Hexatriacontane	C36
1144.24	n-Tetracosane	C24	1160.40	n-Tetracontane	C40
1146.26	n-Hexacosane	C26	1247.44	n-Tetratetracontane	C44

Other isoparaffin mixtures

NEW

2-methyl, 3-methyl and 4-methylalkane mixtures

S-4434-100-4DC

Methylhydrocarbons Mixture C5-C8 (+phytane/pristane)

13 Analytes, each 100 µg/mL in dichloromethane; unit: 1x4.5mL Certan® bottle

Chiron No.	Compound	CAS No.
1231.5	2-Methylbutane	[78-78-4]
1235.6	2-Methylpentane	[107-83-5]
1236.6	3-Methylpentane	[96-14-0]
1238.7	2-Methylhexane	[591-76-4]
1257.7	3-Methylhexane	[589-34-4]
1243.8	2-Methylheptane	[592-27-8]

1872.8	3-Methylheptane	[589-81-1]
1873.8	4-Methylheptane	[589-53-7]
1249.6	Methylcyclopentane	[96-37-7]
1248.7	Methylcyclohexane	[108-87-2]
1870.8	Methylcycloheptane	[4126-78-7]
0635.19	Pristane	[1921-70-6]
0629.20	Phytane	[638-36-8]

Other naphthene mixtures

NEW

S-4438-K-IO **Alkylcycloalkane Mixture 1**

9 Analytes, each 1000µg/mL in isooctane; unit: 1x1.1mL

Chiron No.	Compound	CAS.No.
2285.12	n-Hexylcyclohexane	[4292-75-5]
1044.13	n-Heptylcyclohexane	[5617-41-4]
0110.14	n-Octylcyclohexane	[1795-15-9]
1045.15	n-Nonylcyclohexane	[2883-02-5]
1046.16	n-Decylcyclohexane	[1795-16-0]
1071.17	n-Undecylcyclohexane	[54105-66-7]
1072.18	n-Dodecylcyclohexane	[1795-17-1]
1047.19	n-Tridecylcyclohexane	[6006-33-3]
1500.20	n-Tetradecylcyclohexane	[1795-18-2]

S-4439-K-IO **Alkylcycloalkane Mixture 2**

5 Analytes, each 1000µg/mL in isooctane; unit: 1x1.1mL

Chiron No.	Compound	CAS.No.
1073.21	n-Pentadecylcyclohexane	[6006-95-7]
1871.22	n-Hexadecylcyclohexane	[6812-38-0]
1074.23	n-Heptadecylcyclohexane	[19781-73-8]
1501.24	n-Octadecylcyclohexane	[4445-06-1]
1048.25	n-Nonadecylcyclohexane	[22349-03-7]

BTEX and other aromatics mixtures

S-4342-100-ME **BTEX + BaP**

S-4342-100-50-ME 6 Analytes, each 100µg/mL in methanol; units: 1x1mL, 1x50mL

Chiron No.	Compound	CAS No.
1300.6	Benzene	[71-43-2]
1264.7	Toluene	[108-88-3]
1268.8	Ethylbenzene	[100-41-4]
1266.8	m-Xylene	[108-38-3]
1267.8	o-Xylene	[95-47-6]
0239.20	Benzo[a]pyrene	[50-32-8]

S-4400-10K-2ME

BTX Mixture 1

5 Analytes, each 10mg/mL in methanol; unit: 1x2mL

Chiron No.	Compound	CAS No.
1300.6	Benzene	[71-43-2]
1264.7	Toluene	[108-88-3]
1267.7	o-Xylene	[95-47-6]
1265.8	p-Xylene	[106-42-3]
1266.8	m-Xylene	[108-38-3]

S-4257: BTX Mixture See the THP part in the Environmental section
S-4218: BTX Mixture See the THP part in the Environmental section
S-4219: BTX Mixture See the THP part in the Environmental section

S-4408-200-CY
S-4408-200-10CY

BTEX Mixture 4

6 Analytes, each 200µg/mL in cyclohexane; units: 1x1mL, 1x10 mL

Chiron No.	Compound	CAS No.
1300.6	Benzene	[71-43-2]
1264.7	Toluene	[108-88-3]
1268.8	Ethylbenzene	[100-41-4]
1267.7	o-Xylene	[95-47-6]
1265.8	p-Xylene	[106-42-3]
1266.8	m-Xylene	[108-38-3]

S-4441-100-ME

BTEX Mixture 5

5 Analytes, each 100µg/mL in methanol; unit: 1x5mL screw cap bottle

Chiron No.	Compound	CAS No.
1300.6	Benzene	[71-43-2]
1264.7	Toluene	[108-88-3]
1268.8	Ethylbenzene	[100-41-4]
1266.8	m-Xylene	[108-38-3]
1267.8	o-Xylene	[95-47-6]

S-4447-K-IO

n-Alkylbenzene Mixture

NEW

16 Analytes, each 1000µg/mL in isooctane; unit: 1x1.1mL

Chiron No.	Compound	CAS No.
0392.10	n-Butylbenzene	[104-51-8]
2336.11	n-Pentylbenzene	[538-68-1]
0393.12	n-Hexylbenzene	[1077-16-3]
3508.13	n-Heptylbenzene	[1078-71-3]
0330.14	n-Octylbenzene	[2189-60-8]
1076.15	n-Nonylbenzene	[1081-77-2]
0331.16	n-Decylbenzene	[104-72-3]
1077.17	n-Undecylbenzene	[6742-54-7]
0332.18	n-Dodecylbenzene	[123-01-3]
1078.19	n-Tridecylbenzene	[123-02-4]
1079.20	n-Tetradecylbenzene	[1459-10-5]
1080.21	n-Pentadecylbenzene	[2131-18-2]

1081.22	n-Hexadecylbenzene	[1459-09-2]
1082.23	n-Heptadecylbenzene	[14752-75-1]
1083.24	n-Octadecylbenzene	[4445-07-2]
1084.25	n-Nonadecylbenzene	[29136-19-4]

Other olefin mixtures

S-4138-1ML

Calibration mixture for olefins, ASTM D 6550

15 Analytes, each Wt.% as listed; units: 1x1mL, 5x1mL neat

Chiron No.	Name	Wt.%	Chiron No.	Name	Wt.%
2645.9	1-Nonene	2.5	2692.6	3-Methyl-1,3-pentadiene	2.0
2650.6	Cyclohexene	5.0	2643.5	2-Methyl-1-butene	25.0
2649.6	1-Hexene	5.0	2681.6	2-Methyl-2-pentene	10.0
2648.8	1-Octene	5.0	2684.7	1-Heptene	10.0
2642.10	1-Decene	5.0	2682.9	2-Methyl-1-octene	2.5
3038.5	2-Methyl-1,3-butadiene	5.0	2644.8	2-Methyl-1-heptene	5.0
2651.6	4-Methyl-1-pentene	5.0	2683.7	5-Methyl-1-hexene	10.0
2669.6	1,5-Hexadiene	3.0			

O-PONA – oxygenates

S-4184-K-DD

Qualitative Standard MTBE, ASTM D 5441

32 Analytes, each 0.1 Wt.% in n-Dodecane; unit: 1x1mL

1379.1	Methanol	2270.3	Acetone
1299.5	n-Pentane	1236.6	3-Methylpentane
3017.5	trans-2-Pentene	3970.4	Isobutylene
3972.5	sec-Butyl methyl ether	2151.5	tert-Butyl methyl ether
3976.4	n-Butane	3036.8	2,4,4-Trimethyl-2-pentene
2140.4	tert-Butanol	1231.5	Isopentane
2141.6	Ethyl tert-butyl ether	8031.6	2,3-Dimethyl-1-butene
3978.4	trans-2-Butene	1303.8	3,4,4-Trimethyl-trans-2-pentene
3016.5	cis-2-Pentene	8032.3	2-Propanol
2142.6	tert-Amyl methyl ether	3023.6	4-Methyl-cis-2-pentene
3979.4	cis-2-Butene	3035.8	2,3,4-Trimethyl-2-pentene
3018.5	2-Methyl-2-butene	3015.5	1-Pentene
1304.8	3,5-Dimethyl-1-hexene	1235.6	2-Methylpentane
3019.5	3-Methyl-1-butene	2643.5	2-Methyl-1-butene
3040.5	Cyclopentene	1371.4	Methyl ethyl ketone
1244.8	2,4,4-Trimethyl-1-pentene	1307.12	2,2,4,6,6-Pentamethyl-3-heptene

S-4183-K-DD

Quantitative Standard, ASTM D 5441

28 Analytes, each 0.1 Wt.% in n-Dodecane; unit: 1x1mL

1379.1	Methanol	8031.6	2,3-Dimethyl-1-butene
3019.5	3-Methyl-1-butene	3023.6	4-Methyl-cis-2-pentene
2270.3	Acetone	1235.6	2-Methylpentane
1231.5	Isopentane	1371.4	Methyl ethyl ketone
8032.3	2-Propanol	1236.6	3-Methylpentane

3015.5	1-Pentene	3972.5	sec-Butyl methyl ether
2643.5	2-Methyl-1-butene	2141.6	Ethyl tert-butyl ether
1299.5	n-Pentane	2142.6	tert-Amyl methyl ether
3017.5	trans-2-Pentene	1304.8	3,5-Dimethyl-1-hexene
2140.4	tert-Butanol	1244.8	2,4,4-Trimethyl-1-pentene
3016.5	cis-2-Pentene	3036.8	2,4,4-Trimethyl-2-pentene
3018.5	2-Methyl-2-butene	1303.8	3,4,4-Trimethyl-trans-2-pentene
3040.5	Cyclopentene	3035.8	2,3,4-Trimethyl-2-pentene
1251.5	Methyl tert-butyl ether	1307.12	2,2,4,6,6-Pentamethyl-3-heptene

S-4162-10ML

Daily Quality Control Standard, ASTM D 5986

(without Internal Standard)

13 Analytes, each Wt.% as listed; units: 1x10mL, 5x10 mL neat

	Name:	Wt. %		Name:	Wt. %
1232.6	n-Hexane	12	1264.7	Toluene	9
1240.7	n-Heptane	17	1266.8	m-Xylene	3
1242.8	n-Octane	17	1267.8	o-Xylene	3
1875.10	n-Decane	12	1268.8	Ethylbenzene	3
1132.12	n-Dodecane	5	1270.9	1,2,4-Trimethylbenzene	3
0443.8	2,2,4,-Trimethylpentane	12	2158.10	1,2,4,5-Tetra-methylbenzene	3
1300.6	Benzene	1			

S-4131-1ML

Validation mixture for oxygenates and PONA, ASTM D 6293

33 Analytes; units: 1x1mL, 5x1mL neat

Use this standard to monitor and make adjustments to the total operation of the system.

	Name:	Wt. %		Name:	Wt. %
1250.5	Cyclopentane	1.5	1233.6	2.3-Dimethylbutane	2.0
1299.5	n-Pentane	1.5	1232.6	n-Hexane	2.0
1301.6	Cyclohexane	2.0	2649.6	1-Hexene	1.5
3971.7	4-Methyl-1-hexene	1.5	1248.7	Methylcyclohexane	3.5
1240.7	n-Heptane	3.0	1134.14	n-Tetradecane	2.0
1867.8	cis-1.2-Dimethylcyclohexane	4.5	1268.8	Ethylbenzene	3.5
0443.8	2.2.4-trimethylpentane	4.0	1267.8	o-Xylene	3.0
1242.8	n-Octane	4.0	1298.9	n-Propylbenzene	3.5
3974.9	c,c,c-1,2,4-Trimethylcyclohexane	3.5	1279.9	1.2.4-Trimethylbenzene	3.0
			1274.9	1.2.3-Trimethylbenzene	2.0
1245.9	n-Nonane	3.0	2158.10	1.2.4.5-Tetramethylbenzene	2.0
1875.10	n-Decane	3.5	2159.11	Pentamethylbenzene	2.5
1131.11	n-Undecane	2.0	1382.2	Ethanol	5.0
1132.12	n-Dodecane	2.0	2140.4	tert-Butanol	4.0
1300.6	Benzene	2.5	2151.5	MTBE (methyl tert-butyl ether)	8.0
1264.7	Toluene	2.5	2141.6	ETBE (ethyl tert-butyl ether)	3.0
0718.10	trans-Decahydronaphtalene	3.5	2142.6	TAME (tert-amyl methyl ether)	5.0

S-4404-K-AN

Phenone Mixture

9 Analytes, each 1000µg/mL in acetonitrile; unit: 1x1mL

Chiron No.	Compound	CAS no.
2754.8	Acetanilide	[103-84-4]
2751.8	Acetophenone	[98-86-2]
2749.9	Propiophenone	[93-55-0]
2758.10	n-Butyrophenone	[495-40-9]
2750.11	Valerophenone	[1009-14-9]
2752.12	Hexanophenone	[942-92-7]
2748.13	Benzophenone	[119-61-9]
2757.13	Heptanophenone	[1671-75-6]
2753.14	Octanophenone	[1674-37-9]

International methods

For details see the Methods section, pages 13 and onward (ISO) and 45 and onward (ASTM).

- ISO 9377-2 and the modified OSPAR method:	Determination of Hydrocarbon Oil in Water Index
- ASTM D 2887-06a:	Determination Boiling Range Distribution of Petroleum Fractions
- ASTM D 3606-06e1:	Determination of Benzene and Toluene in Finished Motor and Aviation Gasolines by GC
- ASTM D 3710-95 (2004)	Determination of Boiling Range Distribution of Gasoline and Gasoline Fractions by GC
- ASTM D 4815-04	Determination of Ethers and Alcohols in Gasolines by GC
- ASTM D 5186-03	Determination of Aromatic Content & Polynuclear Aromatic Content by SFC
-ASTM D 5307-97 (2002)	Determination of Boiling Range Distribution
- ASTM D 5441-98 (2003)e1	Determination of Purity of Methyl tert-Butyl Ether by GC
- ASTM D 5442-93 (2003)e1	Analysis of Petroleum Waxes
- ASTM D 5443-04	Determination of PNA in Distillates
- ASTM D 5580-02	Determination Aromatics in Gasoline
- ASTM D 5622-95	Quantitative Determination of Total Oxygen in Gasoline and Methanol by Reductive Pyrolysis
-ASTM D 5769-06	Determination of Benzene, Toluene, and Total Aromatics in Finished Gasolines by GC-MS
-ASTM D5986-96 (2006)	Quantitative Determination of Oxygenates, Benzene, Toluene, C8-C12 Aromatics and Total Aromatics
-ASTM D 6293-98 (2003)e1	Quantitative Determination of O-P
- ASTM D 6296-98 (2003)e1	Quantitative determination of Olefins
- ASTM D 6352-04e1	Determination of the Boiling Range Distribution of Petroleum Distillate Fractions by GC
-ASTM D 6379-04	IP 436-98 Aromatic Hydrocarbon Types in Aviation Fuels and Petroleum Distillates by HPLC Refractive Index
-ASTM D 6550-00	Determination of Olefin Content
- ASTM D 6591-06 = IP 391-95	Aromatic Hydrocarbon Types in Diesel Fuels and Distillates by HPLC Refractive Index.

Sulfur content determination

Overview of the Chiron sulfur calibration mixtures

(S: Chiron Product No, D: ASTM-method)

Matrix / Compound	Light White Mineral Oil (3 cst)	Light White Mineral Oil (20cSt at 40°C)	Heavy White Mineral Oil (70cSt at 40°C)	Isooctane	Toluene	Xylene	Benzene
Di-n-butyl sulfide		**S-4052**	**S-4051**	**S-4050**	**Request**		
		D 2622 D 4294 D 4927	D 2622 D 4294 D 4927	D 3120 D 3246 D 4927	D 5453		
Thiophene					**S-4053** **S-4057**		**S-4059**
					D 6313		D 1685 D 4735
Dibenzothiophene	**S-4159**			**S-4055**		**S-4054** **S-4058**	
	D 5453			D 5453		D 6428	
Benzothiophene					**Request**		
					D 5453		
2-Bromothiophene				**S-4037**			
				D 5623			
3-Chlorothiophene				**S-4036**			
				D 5623			
Diphenyl sulfide				**S-4035**			
				D 5623			
Thiophene/ 2-Methylthiophene				**S-4056** D 2622			

Sulfur calibration standards

S-4050 **Di-n-butyl sulfide in Isooctane**

S-4051 **Di-n-butyl sulfide in Heavy White Mineral Oil (70 cSt at 40°C)**

S-4052 **Di-n-butyl sulfide in Light White Mineral Oil (20 cSt at 40°C)**

Unit: 10 mL screw cap bottle

Chiron No. (Matrix)			Concentration	
Isooctane	**Light White Mineral Oil (20 cSt at 40°C)**	**Heavy White Mineral Oil (70 cSt at 40°C)**	***µ*gS/g (ppm)**	**Wt.%**
S-4050-0-IO	S-4052-0-LW	S-4051-0-HW	Blank	0
S-4050-1-IO	S-4052-1-LW	S-4051-1-HW	1	0.0001
S-4050-3-IO	S-4052-3-LW	S-4051-3-HW	3	0.0003
S-4050-5-IO	S-4052-5-LW	S-4051-5-HW	5	0.0005
S-4050-10-IO	S-4052-10-LW	S-4051-10-HW	10	0.0010
S-4050-20-IO	S-4052-20-LW	S-4051-20-HW	20	0.0020
S-4050-30-IO	S-4052-30-LW	S-4051-30-HW	30	0.0030
S-4050-50-IO	S-4052-50-LW	S-4051-50-HW	50	0.0050
S-4050-75-IO	S-4052-75-LW	S-4051-75-HW	75	0.0075
S-4050-100-IO	S-4052-100-LW	S-4051-100-HW	100	0.0100
S-4050-200-IO	S-4052-200-LW	S-4051-200-HW	200	0.0200
	S-4052-250-LW	S-4051-250-HW	250	0.0250
S-4050-300-IO	S-4052-300-LW	S-4051-300-HW	300	0.0300
S-4050-400-IO	S-4052-400-LW	S-4051-400-HW	400	0.0400
S-4050-500-IO	S-4052-500-LW	S-4051-500-HW	500	0.0500
S-4050-750-IO	S-4052-750-LW	S-4051-750-HW	750	0.0750
S-4050-K-IO	S-4052-K-LW	S-4051-K-HW	1 000	0.1000
S-4050-2K-IO	S-4052-2K-LW	S-4051-2K-HW	2 000	0.2000
	S-4052-2.5K-LW	S-4051-2.5K-HW	2 500	0.2500
S-4050-3K-IO	S-4052-3K-LW	S-4051-3K-HW	3 000	0.3000
	S-4052-4K-LW	S-4051-4K-HW	4 000	0.4000
	S-4052-5K-LW	S-4051-5K-HW	5 000	0.5000
	S-4052-7K-LW	S-4051-7K-HW	7 000	0.7000
	S-4052-10K-LW	S-4051-10K-HW	10 000	1.000
	S-4052-20K-LW	S-4051-20K-HW	20 000	2.000
	S-4052-25K-LW	S-4051-25K-HW	25 000	2.500
	S-4052-30K-LW	S-4051-30K-HW	30 000	3.000
	S-4052-40K-LW	S-4051-40K-HW	40 000	4.000
	S-4052-50K-LW	S-4051-50K-HW	50 000	5.000
	S-4052-60K-LW	S-4051-60K-HW	60 000	6.000
S-4050-Kit	S-4052-Kit	S-4051-Kit	Kit of above	

S-4053

Thiophene in Toluene

Units: 5x1mL ampoule, 1x10 mL screw cap bottle

Chiron No.	Concentration *µ*gS/g (ppm)	Wt.%
S-4053-0	Blank	0
S-4053-K	1 000	0.1000
S-4053-2.5K	2 500	0.2500
S-4053-5K	5 000	0.5000
S-4053-7.5K	7 500	0.7500
S-4053-10K	10 000	1.0000
S-4053-20K	20 000	2.0000
S-4053-30K	30 000	3.0000
S-4053-40K	40 000	4.0000
S-4053-50K	50 000	5.0000
S-4053-Kit	Kit of above	

S-4059

Thiophene in Thiophene-free Benzene (ASTM D 4735-96)

Units: 1x1mL ampoule, 1x10mL screw cap bottle

Chiron No. Light White Mineral Oil (20 cSt at 40°C)	Concentration *µ*g thiophene/g (ppm)	Wt.%
S-4059-0	Blank	0
S-4059-0.5	0.5	0.00005
S-4059-1	1.0	0.00010
S-4059-2	2.0	0.00020
S-4059-4	4.0	0.00040
S-4059-Kit	Kit of above solutions	

S-4056

Thiophene/2-Methylthiophene

(2:1) in isooctane/Toluene(3:1); Units: 5x1mL ampoules, 1x10 mL screw cap bottle

Chiron No.	Concentration *µ*gS/g (ppm)	Wt.%
S-4056-0	Blank	0
S-4056-5	5	0.0005
S-4056-10	10	0.0010
S-4056-25	25	0.0025
S-4056-50	50	0.0050
S-4056-75	75	0.0075
S-4056-100	100	0.0100
S-4056-250	250	0.0250
S-4056-500	500	0.0500
S-4056-750	750	0.0750
S-4056-K	1 000	0.1000
S-4056-Kit	Kit of above solutions	

S-4055 **Dibenzothiophene in Isooctane**
S-4054 **Dibenzothiophene in Xylene**
S-4159 **Dibenzothiophene in White Oil 3 cSt**

Units: 5x1mL ampoule, 1x10mL screw cap bottle

Chiron No. (Matrix)			Concentration	
Isooctane	**Xylene**	**White oil 3 cst**	**μgS/g (ppm)**	**Wt.%**
S-4055-0-IO	S-4054-0-XY	S-4159-0-3C	Blank	0
S-4055-1-IO		S-4159-1-3C	1	0.0001
S-4055-2.5-IO		S-4159-2.5-3C	2.5	0.00025
S-4055-5-IO		S-4159-5-3C	5	0.0005
S-4055-25-IO		S-4159-25-3C	25	0.0025
S-4055-50-IO		S-4159-50-3C	50	0.0050
S-4055-100-IO		S-4159-100-3C	100	0.0100
S-4055-500-IO		S-4159-500-3C	500	0.0500
S-4055-K-IO	S-4054-K-XY	S-4159-K-3C	1 000	0.1000
	S-4054-2.5K-XY	S-4159-2.5K-3C	0.2500	
	S-4054-5K-XY		5 000	0.5000
	S-4054-7.5K-XY	S-4159-7K-3C	0.7500	
	S-4054-10K-XY		10 000	1.0000
	S-4054-20K-XY		20 000	2.0000
	S-4054-30K-XY		30 000	3.0000
	S-4054-40K-XY		40 000	4.0000
S-4055-Kit	S-4054-Kit	S-4159-Kit	Kit of above solutions	

Internal standards for GC analysis

S-4035 **Diphenylsulfide in Isooctane**
S-4037 **2-Bromothiophene in Isooctane**
S-4036 **3-Chlorothiophene in Isooctane**

Units: 5x1mL ampoule, 1x10mL screw cap bottle

Chiron No.			Concentration	
Matrix: Isooctane				
Diphenyl sulfide	**2-Bromothiophene**	**3-Chlorothiophene**	**μgS/g (ppm)**	**Wt.%**
S-4035-0-IO	S-4037-0-IO	S-4036-0-IO	Blank	0
S-4035-K-IO	S-4037-K-IO	S-4036-K-IO	1 000	0.1
S-4035-5K-IO	S-4037-5K-IO	S-4036-5K-IO	5 000	0.5
S-4035-10K-IO	S-4037-10K-IO	S-4036-10K-IO	10 000	1.0

Labelled standards for GC-MS analysis

1068.4-500MG	Thiophene-d4	0.5 g neat
0383.12-100-T	Dibenzothiophene-d8	100 μg/mL in toluene
1692.12-K-IO	2-Fluorodibenzothiophene	1000 μg/mL in isooctane

Standards by ASTM methods

- ASTM D 1685-05	Standard Test Method for Traces of Thiophene in Benzene by Spectrophotometry
- ASTM D 2622-05	Standard Test Method for Sulfur in Petroleum Products by X-Ray Spectrometry
- ASTM D 3120-06e1	Standard Test Method for Trace Quantities of Sulfur in Light Liquid Petroleum Hydrocarbons by Oxidative Microcoulometry
- ASTM D 3246-05	Standard Test Method for Sulfur in Petroleum by Oxidative Microcoulometry
- ASTM D 4294-03	Standard Test method for Sulfur in Petroleum Products by Energy-Dispersive X-ray Fluorescence Spectroscopy
- ASTM D 4735-02	Standard Test Method for Determination of Trace Thiophene in Refined Benzene by Gas Chromatography
- ASTM D 4951-06	Standard Test Method for Determination of Additive Elements in Lubricating Oils by Inductively Coupled Plasma Atomic Emission Spectrometry
-ASTM D 5453-06	Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils Ultraviolet Fluorescence
-ASTM D 5623-94 (2004)e1	Standard Test Method for Sulfur Compounds in Light Petroleum Liquids by Gas Chromatography and Sulfur Selective Detection
-ASTM D 5623	Sulfur Compounds Standard I and II, see below for details
-ASTM D 6313-99	Standard Test Method for Total Sulfur in Aromatic Compounds by Hydrogenolysis and Sulfur Specific Difference Photometry
-ASTM D 6920-03	Standard Test Method for Total Sulphur in Napthenes, Distillates, Reformulated Gasolines, Diesels, Biodiesels, and Motor Fuels by Oxidative Combustion and Electrochemical Detection (Please inquire)

ASTM D 5623-94 (2004)e1

S-4039-1ML — **Sulfur Compounds Standard I**

14 Analytes, approximately 7,14 % of each (by weight); unit:1x1mL neat

Chiron No.	Compound
0184.2	Ethanediol
0185.2	Dimethyl disulphide
0186.1	Carbon disulphide
0188.4	2-Methyl-2-propanethiol
0189.3	1-Propanethiol
0190.3	Ethylmethyl sulfide
0933.4	Thiophene
0192.4	2-Methyl-1-propanethiol
0193.4	Diethyl sulfide
0194.4	1-Butanethiol
0195.5	Dimethyl disulfide
0934.5	2-Methylthiophene
0935.5	3-Methylthiophene
0196.4	Diethyl disulfide

S-4040-K-IO

Sulfur Compounds Standard II

7 Analytes, each 1000μg/mL in isooctane; unit:1x1mL

Chiron No.	Compound
0946.9	2-Methylbenzothiophene
0947.9	3-Methylbenzothiophene
0198.9	4-Methylbenzothiophene
0356.9	5-Methylbenzothiophene
0199.9	6-Methylbenzothiophene
0951.9	7-Methylbenzothiophene
0907.12	Diphenyl sulfide

Special sulfur solutions

S-4072

Sulfur Standard 1

Unit: 10 mL screw cap bottle

Chiron No. Matrix: Methanol	Compound	Concentration
S-4072	Diethyl sulfide	0.5 ppm (w/w)
	Di-n-butyl sulfide	0.5 ppm (w/w)

S-4073

Sulfur Standard 2

Unit: 10 mL screw cap bottle

Chiron No. Matrix: Methanol	Compound	Concentration
S-4073	Di-n-propyl sulfide	0.5 ppm (w/w)
	Di-n-butyl sulfide	0.5 ppm (w/w)

S-4078

Sulfur Calibration Standard

Unit: 10 mL screw cap bottle or custom-made cylinders

Chiron No. Matrix: Methanol	Compound	Concentration
S-4078	Dimethyl sulfide	5 ppm (w/w)
	Methylethyl sulfide	5 ppm (w/w)
	Thiophene	5 ppm (w/w)

S-4082-1-10IO
S-4082-2.5-10IO
S-4082-5-10IO
S-4082-7.5-10IO
S-4082-10-10IO

Chisulfmix/1C

10 Analytes, each in 5 different concentrations in isooctane as listed below; units: 5x10mL, one of each concentration

Chiron No.	Compound
0082.5	Isoamyl mercaptan
0086.6	Hexathiol
0090.8	Octanethiol
1014.4	Methyl propyl disulfide
0196.4	Diethyl disulfide
0190.3	Methylethyl sulfide
1002.6	Dipropyl sulfide
0933.4	Thiophene
0934.5	2-Methylthiophene
0938.8	Benzothiophene

Concentration	
μgS/g (ppm)	**Wt.%**
1	0.0001
2.5	0.00025
5	0.0005
7.5	0.00075
10	0.0010

S-4070-50-5T

High Boiling Sulfur in Toluene for Diesel Fuel Analysis 1

50 ppm S in sulphur-free Toluene; unit: 1x5mL vials

Benzo[b]naphtho[2,1-d]thiophene (0485,16) +
Benzo[b]naphtho[2,3-d]thiophene (0484,16) (1:1)

S-4071-50-5T

High Boiling Sulfur in White Oil for Diesel Fuel Analysis 2

50 ppm S in sulfur-free White Oil (20 cst); units: 1x5mL vials

Benzo[b]naphtho[2,1-d]thiophene (0485,16) +
Benzo[b]naphtho[2,3-d]thiophene (0484,16) (1:1)

Custom prepared sulfur standard-mixtures

Compound / Matrix	Select your preferred matrix (Solvent or white mineral oil with preferred viscosity)
Select the analytes you prefer. Pick from the Chiron Sulfur Guide. Request alternative combinations to those given above.	Please Specify: – Concentration (e.g. ppmS, mg/g or μg/mL) or set of concentration for calibration mixtures. – Number of and size of vials – Type of packaging (ampoules, bottles etc.)

Methods used for sulfur analysis

Abbr.	Method	ASTM-method	Application	Chiron No.
1. GC	Gas Chromatography and Sulfur Selective Detection	D 5623-94 (2004) e1	Light Petroleum	S-4035 – S-4040
	Gas Chromatography and Chemiluminescence	D 5504-01(2006)	Natural Gas	Please request
	Gas Chromatography and Flame Photometric Detection	D 6228	Natural gas	Please request
	Gas Chromatography	D 4735-02	Thiophene in Benzene	S-4059
2. GC-MS	Coupled Gas Chromatography Mass Spectrometry	D 5739-06	Oil Spill Source Indentification	S-4041, S-4042, 1027.12
3. ICP-AES	Inductively Coupled Plasma Atomic Emission Spectroscopy	D 4951-06	Additives in Lubr. Oils	NIST SRM 1622 in white oil
4.	Oxidative Microcoulometry	D 3120-06e1	Light Petroleum Hydrocarbons	S-4052
	Oxidative Microcoulometry	D 3246-05	Petroleum Gas	S-4052
5. XRF	Wavelength Dispersive X-Ray Fluorescence	D 2622-05	Petroleum	S-4050, S-4051, S-4056
	Wavelength Dispersive X-Ray Fluorescence	D 6443-04	Unused Lubricating Oils and Additives	Please request
	Wavelength Dispersive X-Ray Fluorescence	D 4927-05	Unused Lubricating Oils	S-4050, S-4051, S-4052
	Wavelength Dispersive X-Ray Fluorescence Spectroscopy	D 6334-98(2003)e1	Gasoline	Please request
6. EDXRF	Energy Dispersive X-Ray Fluorescence Spectroscopy	D 4294-03	Petroleum Products	S-4050, S4051
	Energy Dispersive X-Ray Fluorescence Spectroscopy	D 6445-99(2004)e1	Gasoline	Please request
7.	Ultraviolet Flourescence	D 5453-06	Light Hydrocarbons, Motor Fuels and Oils	S-4055
8.	Hydrogenolysis and Sulfur Specific Difference Photometry	D 6313-99	Aromatic Hydrocarbons	S-4057
9.	Lamp Method	D 1266-98(2003)e1	Liquefied Petroleum Gas	
10.	General Bomb Method	D 129-00(2005)	Petroleum Products, Lubricating Oils and Greases	
11.	Doctor Test	D 4952-02(2007)	Mercaptans in Motor Fuels	
12.	High-Temperature method	D 1552-03	Petroleum Products	
13.	Potentiometric method	D 3227-04a	Mercaptan in Gasolines, Kerosines etc.	
14.	Spectrophotometry	D 1685-05	Thiophene in Benzene	S-4059, Request

Nitrogen content determination

ASTM D 4629-02 **Standard Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons by Syringe/Inlet Oxidative Combustion and Chemiluminescence Detection.**

See the Methods section, page 51.

S-4140

Nitrogen Calibration Set-Low Boiling Solvents

Unit: 1x1 mL ampoules or 10 mL screw cap bottle
Nitrogen introduced using Pyridine

Chiron No. Matrix: isooctane	Concentration mg/kg (ppm)
S-4140-0-IO	Blank
S-4140-0.3-IO	0.3
S-4140-1.0-IO	1.0
S-4140-10-IO	10
S-4140-25-IO	25
S-4140-50-IO	50
S-4140-75-IO	75
S-4140-100-IO	100

S-4141

Nitrogen Calibration Set-High Boiling Solvents

Unit: 1x1mL ampoules or 10 mL screw cap bottle
Nitrogen introduced using Carbazole

Chiron No. Matrix: isooctane	Concentration mg/kg (ppm)
S-4141-0-IO	Blank
S-4141-0.3-IO	0.3
S-4141-1.0-IO	1.0
S-4141-10-IO	10
S-4141-25-IO	25
S-4141-50-IO	50
S-4141-75-IO	75
S-4141-100-IO	100

S-4142

Low level Nitrogen Calibration

Unit: 1x1mL ampoules or 10 mL screw cap bottle
Nitrogen introduced using Aniline

Chiron No. Matrix: isooctane	Concentration mg/kg (ppm)
S-4142-0-IO	Blank
S-4142-0.5-IO	0.5
S-4142-1.0-IO	1.0
S-4142-2.0-IO	2.0
S-4142-5.0-IO	5.0
S-4142-10.0-IO	10.0

S-4143

Low level Nitrogen & Sulfur Calibration Set

Unit: 1x1mL ampoules or 10 mL screw cap bottle
Nitrogen introduced using Aniline / Sulfur introduced using di-n-Butyl Sulfide

Chiron No. Matrix: Benzene	Concentration mg/kg (ppm)
S-4143-0-B	Blank
S-4143-0.25-B	0.25
S-4143-0.50-B	0.50
S-4143-1.00-B	1.00

Phosphorous standards

NEW

Phosphorus in Light White Mineral Oil

Tri-n-butylphosphate, 99+% (Chiron product nr. 1399.19)
CAS [126-73-8]

Matrix: Isooctane or Light White Mineral Oil, 20cSt
Units: 1x25 mL, 1x100 mL

Isooctane	**Light White Mineral Oil 20 cSt**	**Concentration ppm**
S-4502-0-10IO	S-4503-0-10LM	Blanc
S-4502-1-10IO	S-4503-1-10LM	1
S-4502-2-10IO	S-4503-2-10LM	2
S-4502-3-10IO	S-4503-3-10LM	3
S-4502-5-10IO	S-4503-5-10LM	5
S-4502-10-10IO	S-4503-10-10LM	10
S-4502-20-10IO	S-4503-20-10LM	20
S-4502-30-10IO	S-4503-30-10LM	30
S-4502-50-10IO	S-4503-50-10LM	50
S-4502-75-10IO	S-4503-75-10LM	75
S-4502-100-10IO	S-4503-100-10LM	100
S-4502-200-10IO	S-4503-200-10LM	200
S-4502-250-10IO	S-4503-250-10LM	250
S-4502-300-10IO	S-4503-300-10LM	300
S-4502-400-10IO	S-4503-400-10LM	400
S-4502-500-10IO	S-4503-500-10LM	500
S-4502-750-10IO	S-4503-750-10LM	750
S-4502-K-10IO	S-4503-K-10LM	1 000
S-4502-2K-10IO	S-4503-2K-10LM	2 000
S-4502-2.5K-10IO	S-4503-2.5K-10LM	2 500
S-4502-3K-10IO	S-4503-3K-10LM	3 000
S-4502-4K-10IO	S-4503-4K-10LM	4 000
S-4502-5K-10IO	S-4503-5K-10LM	5 000
S-4502-7K-10IO	S-4503-7K-10LM	7 000
S-4502-10K-10IO	S-4503-10K-10LM	10 000
S-4502-20K-10IO	S-4503-20K-10LM	20 000
S-4502-25K-10IO	S-4503-25K-10LM	25 000
S-4502-30K-10IO	S-4503-30K-10LM	30 000
S-4502-40K-10IO	S-4503-40K-10LM	40 000
S-4502-50K-10IO	S-4503-50K-10LM	50 000
S-4502-60K-10IO	S-4503-60K-10LM	60 000
S-4502-Kit	S-4503-Kit	Kit of above

Also available in Heavy White Mineral Oil, 70cSt (S-4504), cf. EN-14107.

Organophosphates

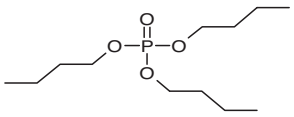
NEW

Standards for Hydraulic Fluid Analysis

Organophosphates are extensively used in hydraulic fluids. Recent alarming reports have shown that organophosphates have neurotoxic effects.

Chiron No.	Name	Abbr.	CAS No.
1400.3	Trimethylphosphate	TMP	512-56-1
8026.6	Triethylphosphate		78-40-0
8027.9	Tripropylphosphate		513-08-6
3966.12	Triisobutylphosphate	TiBP	126-71-6
1399.12	Tri-n-butylphosphate	TnBP (TBP)	126-73-8
2138.18	Triphenylphosphate	TPP	115-86-6
3967.19	Tolyldiphenylphosphate		26444-49-5
2137.21	Tritolylphosphate (isomeric mixture)	TTP	1330-78-5
2135.21	Tri-o-tolylphosphate	ToTP	78-30-8
2134.21	Tri-m-tolylphosphate	TmTP	563-04-2
2136.21	Tri-p-tolylphosphate	TpTP	78-32-0
3687.11	Phosphate Kit		

1g neat or 1000 µg/mL in isooctane solution, 1.1 mL



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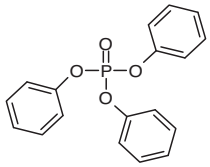

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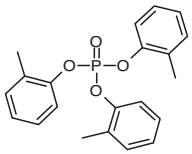

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Petrochemical products

Methanol, quality control standards

S-4043-100-10ME **Methanol QC Reference Mixture I**

4 Analytes, each 100 ppm dissolved in 99.9 % methanol; units: 1x10mL, 10x10mL

Chiron No.	Name	Chiron No.	Name
2270.3	Acetone	1382.2	Ethanol
1371.4	2-Butanone	1320.3	Isopropanol

S-4044-200-10ME **Methanol QC Reference Mixture II**

10 Analytes, each 200 ppm in 99.9 % methanol; units: 1x10mL, 5x10mL

Chiron No.	Name	Chiron No.	Name
1381.2	Methyl formate	1370.5	3-Pentanone
1377.4	2-Butanol	1373.7	1-Heptanol
1375.3	1-Propanol	1374.5	1-Pentanol
1378.6	1-Hexanol	1382.2	Ethanol
1372.8	1-Octanol		

S-4045-05-10ME **Methanol QC Reference Mixture III**
n-Butyl sulfide, 0.5 ppm (weight S by weight) in 99.9 % methanol; units: 1x10mL, 5x10mL

S-4088-200-10ME **Methanol QC Reference Mixture IV**
11 Analytes, each 200 ppm in methanol (Spectrograde); unit: 10x10mL

Chiron No.	Name	Chiron No.	Name
1381.2	Methyl formate	1370.5	3-Pentanone
1381.2	2-Butanol	1373.7	1-Heptanol
1375.3	1-Propanol	1374.5	1-Pentanol
1376.4	1-Butanol	1382.2	Ethanol
1378.6	1-Hexano	1369.6	3-Hexanone
1372.8	1-Octanol		

S-4049-005-10ME **Methanol QC Reference mixture V**
Trimethylamine, 50 ppb (weight by weight), in methanol; Unit: 10x10mL

Xylene, analysis by GC

S-4270 **p-Xylene Impurity Standard with Internal Standards**
ASTM D 3798-03, see the Methods section, page 50.
Units: 1x1mL, 5x1mL + ISTD

Chiron No.	Name	Wt. %		Name	Wt. %
1299.5	n-Pentane	0.15	1265.8	p-Xylene	98.65
1242.8	n-Octane	0.15	1266.8	m-Xylene	0.15
1300.6	Benzene	0.15	1267.8	o-Xylene	0.15
1264.7	Toluene	0.15	2155.9	Cumene	0.15
1268.8	Ethylbenzene	0.15	1298.9	Propylbenzene	0.15
1131.11	n-Undecane (ITSD)	0.5 g			

Benzene, Thiophene in benzene, see ASTM D 4735-02, the Methods section, page 52.

Biodiesel fuels

Biodiesel is produced from vegetable oils, animal and fish fats and recycled grease from restaurants. Biodiesel is methyl esters of fatty acids and are used alone or blended with petroleum based fuels.

New international standards test methods for biodiesel are EN 14078, EN 14103, EN 14105 and ASTM D 6584. The complete requirements of biodiesel fuels are given in EN 14214.

These methods enable the quantitative determination of free and total glycerine by gas chromatography after silylation with MSTFA.

Derivatizing agent

Cat.no.	Description	Package Size
1941.6-1ML	N-methyl-N-trimethylsilyltrifluoroacetamide (MSTFA)	1 mL
1941.6-5G	N-methyl-N-trimethylsilyltrifluoroacetamide (MSTFA)	5 g

Internal standards

Internal standards for EN 14105 and ASTM D 6584:

3642.4-1ML	1,2,4-Butanetriol (Internal Standard No. 1)	1 mL
3642.4-K-10PY	Internal Standard No. 1 stock solution 1000µg/mL in dry pyridine	10 mL
3643.33-1ML	1,2,3-Tricaproylglycerol (tricarpin, Internal Standard No. 2)	1 mL
3643.33-K-10PY	Internal Standard No. 2 stock solution 1000µg/mL in dry pyridine	10 mL
3643.33-8K-10PY	Internal Standard No. 2 stock solution 8000µg/mL in dry pyridine	10 mL

Internal standards for EN 14103:

3165.18-10K-30HP	Methyl heptadecanoate, EN 14103 10 mg/mL in n-heptane	30 mL

Reference substances (EN 14105/ASTM D 6584)

3644.3-500-10PY	Glycerol stock solution 500µg/mL in dry pyridine	10 mL
3645.21-5K-10PY	1-Monooleoylglycerol (monoolein) stock solution 5000µg/mL in dry pyridine	10 mL
3646.39-5K-10PY	1,3-Dioleoylglycerol (diolein) stock solution 5000µg/mL in dry pyridine	10 mL
3647.57-5K-10PY	1,2,3-Trioleoylglycerol (triolein) stock solution 5000µg/mL each in dry pyridine	10 mL
S-4497-10K-10PY	Monoglycerides 3 analytes, each 10 mg/mL in dry pyridine	10 mL

3648.19	Monopalmitoylglycerol (monopalmitin)	[542-44-9]
3649.21	Monostearoylglycerol (monostearin)	[123-94-4]
3650.21	Monooleoylglycerol (monoolein)	[111-03-5]

S-4475-10K-10PY **Monoglycerides**

4 analytes, each 10 mg/mL in dry pyridine; unit: 1x10 mL

3648.19	Monopalmitoylglycerol (monopalmitin)	[542-44-9]
3649.21	Monostearoylglycerol (monostearin)	[123-94-4]
3650.21	Monooleoylglycerol (monoolein)	[111-03-5]
3833.21	Monolinoylglycerol (monolinolein)	[2277-28-3]

Standard for EN 14078

S-4495-SET-10CY **FAME as linoleic acid methyl ester (Chiron No. 3268.19)**

1, 2, 4, 6, and 10 g/L in cyclohexane; unit: 5x10mL

Standard for EN 14103

S-4496-100-AC **FAME EN 14103 Reference Mixture (rape seed methyl esters)**

13 analytes, each 100μg/mL in acetone; unit: 1x1mL

3164.17	Palmitic	C16	
3262.17	Palmitolic	C16:1	
3165.18	Heptadecanoic	C17	Internal standard
1398.19	Steraric	C18	
3273.19	Oleic	C18:1	
3268.19	Linoleic	C18:2	
3266.19	Linolenic	C18:3	
3169.21	Arachdic	C20	
3232.21	Eicosenoic acid (11c)	C20:1	
3171.23	Behenic	C22	
3299.23	Erucic	C22:1	
3173.25	Lignoceric	C24	
3302.25	Nervonic	C24:1	

Calibration solutions

S-4500-SET **Calibration solutions (EN 14105)**

Calibration solution	**1**	**2**	**3**	**4**	**Syringe, μL**
μL of glycerol solution	10	40	70	100	100
μL of monoolein solution	50	120	190	250	500
μL of diolein solution	10	40	70	100	100
μL of triolein solution	10	30	60	80	100
μL of internal standard sol. No.1	80	80	80	80	100
μL of internal standard sol. No.2	100	100	100	100	500

S-4501-SET **Calibration solutions (ASTM D 6584)**

Calibration solution	**1**	**2**	**3**	**4**	**Syringe, μL**
μL of glycerol solution	10	30	50	70	100
μL of monoolein solution	20	50	100	150	200
μL of diolein solution	10	20	40	70	100
μL of triolein solution	10	20	40	70	100
μL of internal standard sol. No.1	100	100	100	100	100
μL of internal standard sol. No.2	100	100	100	100	100

International methods:

For details, see the Methods section, pages 45 and onward (ASTM) and 40 and onward (EN).

- ASTM D 6584-07 Determination of Free and Total Glycerine in B-100 Biodiesel Methyl Esters by GC
- EN 14078:2004 Determination of fatty acid methyl esters (FAME) in middle distillates by IR
- EN 14103:2003 FAME for use in biofuels, diesel fuels
- EN 14105:2003 Fatty Acid Methyl Esters (FAME) - Determination of free and total glycerol and mono-, di-, triglyceride contents (Reference method)
- EN 14214:2003 Fatty acid methyl esters (FAME) for diesel engines - Requirements and test methods

Chapter III-3: Food safety

Table of contents

Contaminants in food

NEW

The general food law:

Regulation (EC) 178/2002 is "The General Food Law (GFL)" within EU and is laying out the general principles and requirements of the food law and European Food Safety Authority.

Council regulation (EEC) N)315/93 of 8.Feb 2003 is laying down the Community procedures for contaminants in food. This regulation does not apply where more specific Community rules exits, such as for pesticides, veterinary drug residues etc.

Food contaminants is defined as any substance not intentionally added to food which is present in food as a result of production, manufacture, processing preparation treatment, packing, packaging, transport or holding of such food as a result of environmental contamination

Examples of contaminants regulated or to be regulated under 315/93:

- Mycotoxins: e.g. Aflatoxins, ochratoxin A, patulin, fusarium-toxins, ergot alkaloids
- Inherent plant toxins: Pyrrozolidine alkaloids, hydrocyanic acid, solanine etc.
- Processing/industrial contaminants: 3-MCPD (3-Monochloropropandiol), inorganic tin, PAHs, acrylamide, furan, ethylcarbamate
- Other environmental contaminants: Dioxins, dioxin and nondioxin-like PCBs, PAHs, BFRs, PFOS, tributyltin, iodine
- Heavy metals: Lead, cadmium, mercury, arsenic, methylmercury
- Nitrates

Naturals toxins

Mycotoxins

Mycotoxins are toxins formed by microorganisms present in food, and should be avoided. Laws in Europa, USA and other regions of the world have strict regulations on the accepted mycotoxin content.

For dioxins and aflatoxin M1 the approach to establish the decision limit can made according to Commission Decision 657/2002/EC. See also http://ec.europa.eu/comm/food/food/chemicalsafety/contaminants/report-sampling_analysis_2004en.pdf

The following EU recommendations, regulations and decisions apply:
Recommendation 2003/598/EC: **Patulin** in apple juice etc.
Recommendation 2006/583/EC: Prevention and reduction of **Fusarium toxins**
Regulation (EC) 1881/2006: **Fusarium toxins in maize.**
Decision 657/2002/EC. For dioxins and **aflatoxin M1** the approach to reporting of analytical results establishing the decision limit can made according to Commission Decision 657/2002/EC. See also http://ec.europa.eu/comm/food/food/chemicalsafety/contaminants/report-sampling_analysis_2004en.pdf

For individual and mixtures of mycotoxins: See the Compounds section, page 420.

Ergot alkaloids

Available ergot alkaloids:

3917.32-100-ME	Ergocornine	[564-36-3]	MW 561.7	100µg/mL in methanol
3765.32-100-ME	Ergocryptine	[511-09-1]	MW 575.7	100µg/mL in methanol

Please inquire for others

Toxic pyrrolizidine alkaloids

See the Compounds section, page 421.

Please inquire if you do not find what you look for. New compounds are under preparation.

Solanine

3865.45-2MG	Solanine, 95%,	[20562-02-1]	MW 868.1	2 mg neat
3866.27-10MG	Solanidine, 98%	[80-78-4]	MW 397.6	10 mg neat

Algae/shellfish toxins

Please see the Compounds section for available algae toxins, page 423.

Other toxic natural food ingredients

Coumarin

Coumarin is a natural compound with a pleasant vanilla-like sweet odour and is found in a wide variety of plants and plant tissues such as green tea and Chinese cinnamon. In living plants coumarin is mostly present as glycoside, but the coumarin is liberated by enzymes. Use of coumarin in a pure form is forbidden due to its toxicity (European Community Directive 88/388/ECC). In Chinese cinnamon, coumarin occur together with cinnamaldehyde and benzaldehyde, while in Ceylon cinnamon coumarin is replaced by eugenol.

3867.9-K-ME	Coumarin (1,2-Benzopyrone)	[91-64-5]	MW 146.15	1000µg/mL in methanol
3868.9-K-ME	Coumarin-d4 (IS)	[185056-83-1]	MW 150.17	1000µg/mL in methanol
3869.9-1ML	Cinnamaldehyde	[14371-10-9]	MW 132.16	1mL neat
3870.7-1ML	Benzaldehyde	[100-52-7]	MW 106.12	1mL neat
3871.10-1ML	Eugenol	[97-53-0]	MW 106.12	1mL neat

3872.5-KIT Coumarin kit, one of each, 5x1mL coumarin-d4

Toxic compounds formed by food processing

3-monochloropropandiol (3-MCPD) and chloroesters

Chloropropandiols are formed during food processing. "Bound" 3-chloropropandiol (lipid chloro esters) is found in different foods.

3873.3-K-ME	3-Chloro-1,2-propandiol	[96-24-2]	MW 110.54	1000µg/mL in methanol
3874.3-K-ME	3-Chloro-1,2-propane-d5-diol	[342611-01-2]		1000µg/mL in methanol

Esters: Please request

Acrylamide

3875.3-1G	Acrylamide	[79-06-1]	1g
3876.3-100-ME	Acrylamide-d5	[108152-65-4]	100µg/mL in methanol

Furan

http://www.cfsan.fda.gov/~dms/furandat.html.

Furan can be formed from carbohydrates, amino acids and ascorbic acid during food processing. The major precursor is reported to be ascorbic acid under thermal conditions (Maerck et al. *J. Agric. Food Chem.* 2006, 54, 2786-2793).

3877.4-1G	Furan	[110-00-9]	1g
3878.4-100-ME	Furan-d4	[6142-90-1]	100µg/mL in methanol

Stigmastadienes

Stigmastadienes are formed by the processing of olive and other vegetable oils.
See below for stigmastadiene standards

PAHs in animal and vegetable fats and oils

See ISO method 15753: 2006, page 30.

S-4469-100-T	15 Selected PAHs in toluene
S-4469-200-5AN	15 Selected PAHs in acetonitrile

Food packaging contaminants

Recycled fibres

It has been shown that recycled fibres may contain considerable amounts of diisopropylnaphthalene, diisobutylphthalate and benzophenone.
2,3,5-Trimethylnaphthalene is applied as internal standard:

2102.16-10MG	DiBP (Diisobutyl phthalate)	[84-69-5]
1126.16-K-IO	DIPN (Diisopropylnaphthalene)	[24157-81-1]
2748.13-1ML	Benzophenone	[119-61-9]
0706.13-500-IO	2,3,5-Trimethylnaphthalene	[2245-38-7]

Plasticizers, phthalates and adipates

There are EU-regulations on the content of plasticizers in food as a result of food packaging. Despite of these regulations, high concentrations (with a mean over 200 ppm) of plasticizers have been found in the gaskets of lids of food-jars.

	ESBO (epoxidized soybeen oil, please inquire)	
1225.12-10MG	DEPH (diethyl phthtate)	[84-66-2]
3049.28-10MG	DIDP (diisodecyl phthalate)	[26761-40-0]
1229.26-10MG	DINP (diisononyl phthalate)	[28553-12-0]
1224.24-10MG	DEHA (diethylhexyl phthalate)	[117-81-7]

For details on phthalates and adipates, see the Compounds section, pages 381-382.

2-Ethylhexanoic acid from jar lids

2-Ethylhexanoic acid (EHA) is widely used in the technical sector as an intermediate for production of paint additives, thickening agent for fuels, stabilizers for silicones etc.

2-Ethylhexanoic acid, defined as an hazardous substance, have been found in baby food and fruit juices filled in glass bottles with twist-off lids.

3879.8-K-ME	2-Ethylhexanoic acid	[149-57-5]	MW 144.22	1000µg/mL in methanol
3880.8-K-ME	2-Ethylhexanoic acid-d15	[352431-38-1]	MW 159.30	1000µg/mL in methanol

Semicarbazide (SEM)

Semicarbazide is a metabolite of nitrofurazone (agricultural drug forbidden in Europe) and formed from thermal breakdown of azodicarbonamide. The analysis is performed by transformation to 2-nitrobenzaldehyde.

3881.7-1G	2-Nitrobenzaldehyde	[552-89-6]	MW 151.12	1g
3882.1-100MG	Semicarbazide, 98%	[57-56-7]	MW 75.07	100mg
3883.2-100MG	Azodicarbonamide	[123-77-3]	MW 116.03	100mg
3884.6-100MG	Nitrofurazone (5-Nitro-2-furfurylidene semicarbazone)	[59-87-0]	MW 198.14	100mg

Ethyl carbamate

The World Health Organisation (WHO) has officially labelled ethyl carbamate, a compound produced during yeast fermentation, as a Group 2A carcinogen, ranking it alongside other substances likely to cause cancer in humans.

3885.3-100mg	Ethyl carbamate	[51-79-6]	MW 89.09	100mg

ITX - Isopropylthioxanthone

Italian authorities have detected baby milk cartons containing the chemical Isopropylthioxanthone (ITX). ITX is used in printing inks on milk and fruit juice cartons.

ITX is a mixture of two isomers to which the US EPA has given a high hazard ranking for environmental effects. The 2-isomer is the dominant ingredient. The European Food Safety Authority (EFSA) has recently undertaken a risk assessment on ITX: **http://www.efsa.eu.int/science/afc/afc_opinions/1256_en.html**

2722.16-K-IO	2-Isopropylthioxanthone (99+%) [5495-84-1], 1000µg/mL in isooctane
2722.16-10MG	10mg neat

2726.16-K-IO 4-Isopropylthioxanthone (99+%) [83846-86-0], 1000µg/mL in isooctane
2726.16-10MG 10mg neat

Internal standard

2732.16-100-IO 1,3,4-d_3-2-Isopropylthioxanthone (98+%), 100 µg/mL, 1.1 mL in isooctane
2732.16-10MG 10mg neat

Veterinary drug residues

Stilbenes - DES
Antithyroid agents – thiouracil
Steroids – boldenone, testosterone etc.
Resorcilic acid lactones – zearalenol etc.
Cortico-steroids – dexamethazone, prednisolone etc.
Beta-antagonists – clenbutenol

Please inquire.

Environmental contaminants

POPs

Dioxins, page 358.
PFOS, PFAs, pages 363-365.
PCBs, pages 354-356.
Pesticides, pages 367-372.
See the Environmental section, page 109 and onward, and the Compounds section, page 223 and onward.

Regulation (EC) 333/2007 of 28 March 2007 is applicable to sampling and methods of analysis of metals, 3-MCPD and PAH, and replaces former Commission Directives (2001/22/Ec, 2004/16/EC and 2005/10/EC. For dioxins and aflatoxin M1 the approach to establish the decision limit can made according to Commission Decision 657/2002/EC. See also http://ec.europa.eu/comm/food/food/chemicalsafety/contaminants/report-sampling_analysis_2004en.pdf

Aroma chemicals, taste and odors (aroma)

Off-flavour compounds

3886.8-100-ME	Skatole	[83-34-1]	131.18	Faecal-like
3887.11-100-ME	2-Methylisoborneol	[2371-42-8]	168.28	Earthy, muddy
3888.12-100-ME	(+/-)-Geosmin	[16423-19-1]	182.31	Earthy
3889.7-100-ME	2,4,6-Trichloroanisole	[87-40-1]	211.48	Mouldy-like
3890.4-100-ME	Methional	[3268-49-3]	104.17	Sunlight flavour in milk
	6-trans-Nonenal			Been-like flavour in milk powder
	cis-1,5-Octadien-3-one	[65767-22-8]		Metallic flavour in milk fat
	Octa-3,5-dien-2-one			Hay-like in deap frozen peas
3891.15-100-ME	Nootkatone	[4674-50-4]	218.34	Grapefruit note in orange juice
3892.10-100-ME	Carvone	[99-49-0]	150.22	Terpene note in orange juice
3893.5-100-ME	3-Methyl-2-buten-1-thiol	[5287-45-6]	102.19	Sunlight flavour in beer

Thiazoles

3894.5-100-ME	2-Acetylthiazole	[24295-03-2]	217.18	Cereal, popcorn
3895.5-100-ME	2-Acetyl-2-thiazoline	[29926-41-8]	129.18	Popcorn
3896.7-100-ME	Benzothiazole	[95-16-9]	135.18	Quinoline, rubber
3897.7-100-ME	2-Isobutylthiazole	[18640-24-9]	141.23	Green, tomato, wine

Pyrazines

3770.9-K-IO	2-sec-Butyl-3-methoxypyrazine	24168-70-5	1000µg/mL	isooctane	Earthy
3771.6-K-IO	2,3-Dimethylpyrazine	5910-89-4	1000µg/mL	isooctane	Green, nutty, coffee
3772.6-K-IO	2,5-Dimethylpyrazine	123-32-0	1000µg/mL	isooctane	Chocolate, roasted, earthy
3773.6-K-IO	2,6-Dimethylpyrazine	108-50-9	1000µg/mL	isooctane	Chocolate, roasted nuts, fried potato
3774.8-K-IO	2-Ethyl-3,5-dimethylpyrazine	13925-07-0	1000µg/mL	isooctane	Earthy, roasted, nutty
3775.8-K-IO	2-Ethyl-3,6-dimethylpyrazine	13360-65-1	1000µg/mL	isooctane	Earthy, roasted
3776.7-K-IO	2-Ethyl-3-methoxypyrazine	25680-58-4	1000µg/mL	isooctane	Roasted nuts
3777.7-K-IO	2-Ethyl-3-methylpyrazine	15707-23-0	1000µg/mL	isooctane	Potato, roasted, cereal
Please inquire	2-Ethyl-5-methylpyrazine	13360-64-0	Please inquire		Nutty, roasted
3779.6-K-IO	2-Ethylpyrazine	13925-00-3	1000µg/mL	isooctane	Musty, nutty
3780.9-K-IO	2-Isobutyl-3-methoxypyrazine	24683-00-9	1000µg/mL	isooctane	Hot paprika
3781.9-K-IO	2-Isobutyl-3-methylpyrazine	13925-06-9	1000µg/mL	isooctane	
3782.8-K-IO	2-Methoxy-3-isopropylpyrazine	25773-40-4	1000µg/mL	isooctane	Earthy, pepper, vegetable
3783.6-K-IO	2-Methoxy-3-methylpyrazine	2847-30-5	1000µg/mL	isooctane	Roasted nuts
3784.5-K-IO	2-Methoxypyrazine	3149-28-8	1000µg/mL	isooctane	Nutty, Sweet
3785.5-K-IO	2-Methylpyrazine	109-08-0	1000µg/mL	isooctane	Green, musty, potato
3787.7-K-IO	2,3,5-Trimethylpyrazine	14667-55-1	1000µg/mL	isooctane	Earthy, nutty, roasted
3786.8-K-IO	2,3,5,6-Tetramethylpyrazine	1124-11-4	1000µg/mL	isooctane	Musty, roasted

Phenols

1358.7-1G	p-Cresol	[106-44-5]	1g	Smoky: Coffee, roated peanuts
1411.8-1G	4-Ethylphenol	[123-07-9]	1g	Woody: Milk, tomatoes, coffee
2372.7-K-IO	Guaiacol	[90-05-1]	1000μg/mL in isooctane	Smoky: Coffee, milk, meat
3898.8-K-MX	4-Vinylphenol	[2628-17-3]		Harch, smoky: Beer and milk
3899.8-K-IO	2-Methoxy-4-vinylphenol	[7786-61-0]	1000μg/mL in isooctane	Clove-like: Coffee, beer, apple
3900.8-1ML	Eugenol	[97-52-7]	1mL	Spicy: Tomato paste, brandy
2370.8-K-IO	Vanillin	121-33-5]	1000μg/mL in isooctane	Vanilla: Vanilla, rum, coffee

Terpenes

Myrcene	Carveol	Camphor
trans-Ocimene	α-Terpineol	Fenchone
cis-Ocimene	Perilla alcohol	trans-α-Farnesene
Linalool	Menthene	cis-α-Farnesene
Geraniol	Pulegone	β-Farnesene
Nerol	Carvone	Farnesol
Neroloxide	1,3-p-Menthadien-7-al	all-trans-α Sinensal
Citronellol	1,8-Cineole	trans,trans,cis-α-Sinesal
Rose oxide	1,4-Cineole	β-Bisabolene
Hotrienol	Sabiene	(-)-Zingiberene
Limonene	Thujone	(-)-Sesquiphellandrene
α-Terpinene	(+)-cis-Sabiene hydrate	Humulene
α-Phellandrene	(+)-trans-Sabiene hydrate	β-Cadinene
β-Phellandrene	α-Pinene	Valencene
γ-Terpinene	β-Pinene	(+)-Nootkatoone
Menthol	Camphene	β-Selinene
Pulegol	Δ^3-Carene	β-Caryophyllene

Please inquire

Food colours

Carotenoids

The following carotenoids are produced commercially as food additives (J. Paust in *Carotenoids* Vol.2, Eds Britton, Liaaen-Jensen and Pfander, Birkhäuser, 1996):

2641.40-10MG	β,β-Carotene	[7235-40-7]	E 160a	Margarine, juice, health food
3901.40-5MG	Canthaxathin	[514-78-3]	E 161g	Poultry, egg york and broiler skin
3902.,40-5MG	Astaxanthin	[472-61-7]		Aquaculture, salmon and trout
	Ethyl 8'-apo-β-caroten-8'-oate			Poultry, egg york and broiler skin
3903.30-5MG	8'-Apo-β-caroten-8'-al	[1107-26-2]	E 160e	Cheese, dressings
	Citranaxanthin	[3664-90-8]		Poultry, egg york pigmentation

Natural carotenoids used or found in food

3925.40-5MG	Lycopene	[502-65-8]	E 160d	Mayonainnes, ketchup, sauces, tomatoes
8102.40-1MG	Capxanthin	[465-42-9]		Pepper, Paprica
3927.21-5MG	Lutein	[127-40-2]		Alfalfa
3654.8-1MG	Zeaxanthin	[144-68-3]		Maize
3904.25-5MG	Bixin	[6983-79-5]	E 160b	Used in fats and mayonnaise, safran

Chlorophylls

3928.55-1G	Chlorophyll	[1406-65-1]	Green	E 140	Edible oils
	Chlorophyllin	[11006-34-1]	Green	E 141	Confectionary, candy, jellies
3593.55-1MG	Chlorophyll a	[479-61-8]			
3594.55-1MG	Chlorophyll b	[519-62-0]			

Other common food colours

3905.16-1G	Tartrazine	[1934-21-0]	Lemon yellow	E 102	Puddings, ice creams etc
3906.17-1G	Riboflavin	[83-88-5]	Yellow	E 101	Mayonnaise, soups, dessert
3907.21-1G	Curcumin	[458-37-7]	Yellow-red	E 100	Mustard
3908.16-1G	Sunset Yellow	[2783-94-0]	Orange	E 110	Beverages, honey like products
3909.20-1G	Amaranth, Red No 2	[915-67-3]	Red, Bluish	E 123	Beverages, candy
	Ponceau 4R	[2611-82-7]	Scarlet-red	E 124	Beverages, candy, salmon, cheese
3910.22-1G	Carmine	[1390-65-4]	Bright red	E 120	Alcoholic beverages
	Anthocyanindin		Red-violet	E 163 a-f	Jams, pop drinks
	Erythrosine, Red No 3	[16423-68-0]	Cherry-red	E 127	Fruits, jams, candy products
3911-1G	Red 2G	[3734-67-6]	Red, Bluish	E 128	Confectionary
	Indigo Carmine, Blue No 2	[860-22-0]	Purple blue	E 132	Confectionary, candy
3912.27-1G	Patent blue V	[3536-49-0]	Blue, greenish	E 131	Confectionary, candy
	Brilliant Blue, Blue No 1	[3844-45-9]	Blue, greenish	E 133	Confectionary, candy
	Green S, Brilliant Green BS	[633-03-4]	Green	E 142	
	Black BN		Violet, bluish	E 151	Fish roe colouring, confectionary

Please inquire

Preservatives, antioxidants, sweeteners

Please inquire.

Other natural products in food

Carotenoids

See Food colours above

Lipids and fatty acids

See the Compounds section, pages 425-427.

Steroids, sterols

See the Compounds section, pages 412-415, and below.

Sterols in animal fats, milk fat and vegetable oils NEW

Animal fats are rich in cholesterol (C27) while plant materials are rich in C29-Sterols like sitosterol and stigmasterol.

New ISO methods for the analysis of sterols in anhydrous milk fat (ISO 18078/ISO 18252) and animal and vegetable oils (ISO 12228) has recently been introduced:

Available products

1583.30-600-DI 1583.30-600-10DI	Betulin, Internal Standard Solution, ISO 18078 600µg/mL in di-isopropyl ether	1x1mL, 1x10mL, 5x10mL
1583.30-K-AC 1583.30-K-10AC	Betulin, Internal standard solution, ISO 12228 1.0 mg/mL in acetone	1x1mL, 1x10mL
0622.27-600-HX 0622.27-600-10HX	5α-Cholestane (99+%), Internal standard solution, ISO 18252 600µg/mL in n-hexane/ethanol (1:10) or n-hexane	1x1mL, 1x10mL
2900.27-600-HX 2900.27-600-10HX	Cholesterol standard solution 600µg/mL in n-hexane	1x1mL, 1x10mL
2795.27-K-AC 2795.27-K-10AC	5α-Cholestan-3-ol (Cholestanol), Alternative internal standard 1.0mg/mL in acetone	1x1mL, 1x10mL
3913.28-100-HX	Campesterol standard solution 100µg/mL in n-hexane	1x1mL, 5x1mL
3767.29-100-HX	Stigmasterol standard solution 100µg/mL in n-hexane	1x1mL, 5x1mL
2732.29-100-HX	β-Sitosterol standard solution 100µg/mL in n-hexane	1x1mL, 5x1mL

S-4487 **Sterol standard mixture for ISO 12078, neat mixture in 1mL sealed ampoule**

(Ref 9.1.2 in the standard) For Qualitative analysis after silylation

2900.27	Cholesterol	600μg
3913.28	Campesterol	100μg
3707.29	Stigmasterol	100μg
2732.29	Sitosterol	100μg
1583.30	Betulin (IS)	600μg

S-4494 **Sterol standard mixture for ISO 18252**

For Qualitative analysis, neat in 1 mL sealed ampoulle

2900.27	Cholesterol	600μg
3913.28	Campesterol	100μg
3767.29	Stigmasterol	100μg
2732.29	Sitosterol	100μg
1583.30	5a-Cholestane (IS)	600μg

Dissolve in 0.25 mL n-hexane for split injector or 3 mL for on-column injector

S-4498 **Standard solution for TLC, ISO 12228**

2900.27	Cholesterol	1mg/mL in acetone
1583.30	Betulin	5mg/mL in acetone

S-4499 **Identification mixture for sterols, ISO 12228**

50 μg/mL each in isooctane

2900.27	Cholesterol
2795.27	Cholestanol
2734.28	Brassicasterol
3913.28	Campesterol
3767.29	Stigmasterol
2732.29	Sitosterol
2717.29	Sitostanol
3915,30	Erythrodiol
1681.30	Uvaol
1583.30	Betulin

Silylating agents

1940.3-5ML	Trimethylchlorosilane, TMCS
1943.6-10ML	Hexamethyldisilazane, HMDS
1941.6-1ML	N-Methyl-N(trimethylsilyl)-trifluoroacetamide, MSTFA
1941.6-5G	N-Methyl-N(trimethylsilyl)-trifluoroacetamide, MSTFA
3916.8-1ML	N-Methyl-N-(trimethylsilyl)-heptafluorobutyramide, MSHFBA

Stigmastadiene in vegetable oils/olive oils

NEW

ISO method 15788

The steradienes content and especially the stigmastadiene content is determined in vegetable oils because steradienes are formed by dehydration of sterols during bleaching and also partially during steam washing and deodorization. The method is also suitable as a screening method to detect the presence of refined vegetable oils in virgin oils such as olive oil.

0678.27-K-BM	Cholesta-3,5-diene stock solution 1mg/mL in tert-butyl methyl ether, 1mL
0678.27-10-MX	Cholesta-3,5-diene External standard solution 10µg/mL (0.01µg/µL) in acetonitrile/ tert-butyl methyl ether 1:1, 1mL
0678.27-2-PT	Cholesta-3,5-diene Internal standard solution 2µg/mL in petroleum ether, 1mL
0622.27-K-IO	5α-Cholestane standard solution for GC 1mg/mL in isooctane, 1 mL

Reference standards

0678.27-100-IO	Cholesta-3,5-diene
0686.29-100-IO	Stigmastatriene, (24R)-24-Ethylcholesta-3,5,22-triene
0682.28-200-IO	Campestadiene, (24R)-24-Methylcholesta-3,5-diene, mix with 24-Ethyl
0682.29-100-IO	Stigmastadiene, (24R)-24-Ethylcholesta-3,5-diene

ISO methods

For details, see the Methods section, page 13 and onward.

- ISO 12078, IDF 159:2006	Sterols in milk fat
- ISO 18252, IDF 200:2006	Sterols in milk fat
- ISO 12228:1999	Sterols in animal and vegetable fats and oil
- ISO 15788-2:2006	Stigmastadienes in vegetable oils

Chapter III-4: Pharmaceuticals and forensics

Table of contents

Pharmaceuticals and forensics

For details, see the Compounds section, pages 388-411.

Pharmaceutical reference standards

In order to meet the requirements of the different pharmacopeias, Chiron is now offering traceable chemical reference substances (CRMs) for pharmaceuticals analysis.

Impurities of pharmaceutical products

Common impurities as defined by international pharmacopeias, and in particular the EP (European Pharmacopeia) are now available. The products are carefully analysed for identity and purity, and a certificate is supplied for each product.

Pharmaceutical and forensic metabolites reference standards

As a new project, Chiron now offers metabolites of common pharmaceuticals and forensic drugs. Such products are important in drug development as well as the surveillance of the pharmaceutical level in patients.

Chiron has developed and possesses proprietary technology for production of sulphates and glucuronide metabolites of alcohols and amines, and custom synthesis inquiries are welcome.

With the access to parent narcotics on commercial scale, Chiron can now offer standards for important drugs as well as their important metabolites. Drug consumption analysis is important in order to control drug use among patients and the abuse of restricted narcotics.

Narcotics – controlled substances

Several of the listed compounds are subject to narcotics legislation. This means that import and export documentation is required. Please consult your local distributor or contact Chiron for help.

Nicotins

Chiron now offers solutions of native and labelled standards for common nicotine derivatives, including cotenine, anatabine, and many others. Please contact us for any products you may not find in our catalogue.

GC-IRMS standards for sports, forensic and geochemical applications

The isotope ratio C12/C13 is individual from sample to sample and is a useful tool for the identification of the origin of different matters.

Misuse of synthetic steroids can be determined this way, as well as policing possible mixing of natural and synthetic natural products.

The isotope ratio changes with the age of the material, and is therefore used in geochemical determinations.

For such application Chiron offers reference standards with an established C12 / C13 ratio. The Chiron standards are straight hydrocarbons from C11 to C40. Others, like several steroids, will be offered. Please inquire or let us know your suggestions.

Chapter IV: Compounds

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Biomarkers and hydrocarbons

Aliphatic alkanes (Paraffines)

Deuterated n-alkanes

Cat.No.	Name	Description	MW	Cas.No.	Conc.	Solvent	Quantity	Volume
1557.5-K-ME	n-Pentane-d12		84.22	[2031-90-5]	1000µg/mL	methanol	1	1mL
1557.5-1G	n-Pentane-d12		84.22	[2031-90-5]	neat		1	1g
1558.6-K-ME	n-Hexane-d14		100.26	[21666-38-6]	1000µg/mL	methanol	1	1mL
1558.6-1G	n-Hexane-d14		100.26	[21666-38-6]	neat		1	1g
1559.7-K-ME	n-Heptane-d16		116.30	[33838-52-7]	1000µg/mL	methanol	1	1mL
1559.7-1G	n-Heptane-d16		116.30	[33838-52-7]	neat		1	1g
1560.8-K-ME	n-Octane-d18		132.34	[17252-77-6]	1000µg/mL	methanol	1	1mL
1560.8-1G	n-Octane-d18		132.34	[17252-77-6]	neat		1	1g
1561.9-K-ME	n-Nonane-d20		148.38	[121578-11-8]	1000µg/mL	methanol	1	1mL
1561.9-1G	n-Nonane-d20		148.38	[121578-11-8]	neat		1	1g
1543.10-K-IO	n-Decane-d22		164.42	[16416-29-9]	1000µg/mL	isooctane	1	1mL
1543.10-K-IO	n-Decane-d22		164.42	[16416-29-9]	1000µg/mL	isooctane	5	1mL
1543.10-K-IO	n-Decane-d22		164.42	[16416-29-9]	1000µg/mL	isooctane	10	1mL
1544.11-K-IO	n-Undecane-d24		180.46	[164858-54-2]	1000µg/mL	isooctane	1	1mL
1544.11-K-IO	n-Undecane-d24		180.46	[164858-54-2]	1000µg/mL	isooctane	5	1mL
1544.11-K-IO	n-Undecane-d24		180.46	[164858-54-2]	1000µg/mL	isooctane	10	1mL
1019.12-K-IO	n-Dodecane-d26		196.50	[16416-30-1]	1000µg/mL	isooctane	1	1mL
1019.12-K-IO	n-Dodecane-d26		196.50	[16416-30-1]	1000µg/mL	isooctane	5	1mL
1019.12-K-IO	n-Dodecane-d26		196.50	[16416-30-1]	1000µg/mL	isooctane	10	1mL
1545.13-K-IO	n-Tridecane-d28		212.54	[121578-12-9]	1000µg/mL	isooctane	1	1mL
1545.13-K-IO	n-Tridecane-d28		212.54	[121578-12-9]	1000µg/mL	isooctane	5	1mL
1545.13-K-IO	n-Tridecane-d28		212.54	[121578-12-9]	1000µg/mL	isooctane	10	1mL
1546.14-K-IO	n-Tetradecane-d30		228.58	[204244-81-5]	1000µg/mL	isooctane	1	1mL
1546.14-K-IO	n-Tetradecane-d30		228.58	[204244-81-5]	1000µg/mL	isooctane	5	1mL
1546.14-K-IO	n-Tetradecane-d30		228.58	[204244-81-5]	1000µg/mL	isooctane	10	1mL
1547.15-K-IO	n-Pentadecane-d32		244.62	[36340-20-2]	1000µg/mL	isooctane	1	1mL
1547.15-K-IO	n-Pentadecane-d32		244.62	[36340-20-2]	1000µg/mL	isooctane	5	1mL
1547.15-K-IO	n-Pentadecane-d32		244.62	[36340-20-2]	1000µg/mL	isooctane	10	1mL
1020.16-K-IO	n-Hexadecane-d34		260.65	[15716-08-2]	1000µg/mL	isooctane	1	1mL
1020.16-K-IO	n-Hexadecane-d34		260.65	[15716-08-2]	1000µg/mL	isooctane	5	1mL
1020.16-K-IO	n-Hexadecane-d34		260.65	[15716-08-2]	1000µg/mL	isooctane	10	1mL
1548.17-K-IO	n-Heptadecane-d36		276.69	[39756-35-9]	1000µg/mL	isooctane	1	1mL
1548.17-K-IO	n-Heptadecane-d36		276.69	[39756-35-9]	1000µg/mL	isooctane	5	1mL
1548.17-K-IO	n-Heptadecane-d36		276.69	[39756-35-9]	1000µg/mL	isooctane	10	1mL
1549.18-K-IO	n-Octadecane-d38		292.73	[16416-31-2]	1000µg/mL	isooctane	1	1mL
1549.18-K-IO	n-Octadecane-d38		292.73	[16416-31-2]	1000µg/mL	isooctane	5	1mL
1549.18-K-IO	n-Octadecane-d38		292.73	[16416-31-2]	1000µg/mL	isooctane	10	1mL
1550.19-K-IO	n-Nonadecane-d40		308.77	[39756-36-0]	1000µg/mL	isooctane	1	1mL
1550.19-K-IO	n-Nonadecane-d40		308.77	[39756-36-0]	1000µg/mL	isooctane	5	1mL
1550.19-K-IO	n-Nonadecane-d40		308.77	[39756-36-0]	1000µg/mL	isooctane	10	1mL
1021.20-K-IO	n-Eicosane-d42		324.81	[62369-67-9]	1000µg/mL	isooctane	1	1mL
1021.20-K-IO	n-Eicosane-d42		324.81	[62369-67-9]	1000µg/mL	isooctane	5	1mL
1021.20-K-IO	n-Eicosane-d42		324.81	[62369-67-9]	1000µg/mL	isooctane	10	1mL
1551.21-K-IO	n-Heneicosane-d44		340.85	[39756-37-1]	1000µg/mL	isooctane	1	1mL
1551.21-K-IO	n-Heneicosane-d44		340.85	[39756-37-1]	1000µg/mL	isooctane	5	1mL
1551.21-K-IO	n-Heneicosane-d44		340.85	[39756-37-1]	1000µg/mL	isooctane	10	1mL
1552.22-K-IO	n-Docosane-d46		356.89	[260411-88-9]	1000µg/mL	isooctane	1	1mL
1552.22-K-IO	n-Docosane-d46		356.89	[260411-88-9]	1000µg/mL	isooctane	5	1mL
1552.22-K-IO	n-Docosane-d46		356.89	[260411-88-9]	1000µg/mL	isooctane	10	1mL
1553.23-K-IO	n-Tricosane-d48		372.93	[203784-75-2]	1000µg/mL	isooctane	1	1mL
1553.23-K-IO	n-Tricosane-d48		372.93	[203784-75-2]	1000µg/mL	isooctane	5	1mL
1553.23-K-IO	n-Tricosane-d48		372.93	[203784-75-2]	1000µg/mL	isooctane	10	1mL
1022.24-K-IO	n-Tetracosane-d50		388.97	[16416-32-3]	1000µg/mL	isooctane	1	1mL
1022.24-K-IO	n-Tetracosane-d50		388.97	[16416-32-3]	1000µg/mL	isooctane	5	1mL
1022.24-K-IO	n-Tetracosane-d50		388.97	[16416-32-3]	1000µg/mL	isooctane	10	1mL

1554.25-K-IO	n-Pentacosane-d52	405.01	[121578-13-0]	1000µg/mL	isooctane	1	1mL
1554.25-K-IO	n-Pentacosane-d52	405.01	[121578-13-0]	1000µg/mL	isooctane	5	1mL
1554.25-K-IO	n-Pentacosane-d52	405.01	[121578-13-0]	1000µg/mL	isooctane	10	1mL
1555.26-K-IO	n-Hexacosane-d54	421.05		1000µg/mL	isooctane	1	1mL
1555.26-K-IO	n-Hexacosane-d54	421.05		1000µg/mL	isooctane	5	1mL
1555.26-K-IO	n-Hexacosane-d54	421.05		1000µg/mL	isooctane	10	1mL
1309.28-K-IO	n-Octacosane-d58	453.12	[16416-33-4]	1000µg/mL	isooctane	1	1mL
1556.30-K-IO	n-Triacontane-d62	485.20	[93952-07-9]	1000µg/mL	isooctane	1	1mL
1556.30-K-IO	n-Triacontane-d62	485.20	[93952-07-9]	1000µg/mL	isooctane	5	1mL
1556.30-K-IO	n-Triacontane-d62	485.20	[93952-07-9]	1000µg/mL	isooctane	10	1mL
1308.32-K-IO	n-Dotriacontane-d66	517.28	[62369-68-0]	1000µg/mL	isooctane	1	1mL
1308.32-K-IO	n-Dotriacontane-d66	517.28	[62369-68-0]	1000µg/mL	isooctane	5	1mL
1308.32-K-IO	n-Dotriacontane-d66	517.28	[62369-68-0]	1000µg/mL	isooctane	10	1mL
1310.36-K-IO	n-Hexatriacontane-d74	581.44	[16416-34-5]	1000µg/mL	isooctane	1	1mL
1310.36-K-IO	n-Hexatriacontane-d74	581.44	[16416-34-5]	1000µg/mL	isooctane	5	1mL
1310.36-K-IO	n-Hexatriacontane-d74	581.44	[16416-34-5]	1000µg/mL	isooctane	10	1mL

n-Alkanes

1299.5-K-ME	n-Pentane	72.15	[109-66-0]	1000µg/mL	methanol	1	1mL
1299.5-10ML	n-Pentane	72.15	[109-66-0]	neat		1	10mL
1232.6-K-ME	n-Hexane	86.18	[110-54-3]	1000µg/mL	methanol	1	1mL
1232.6-10ML	n-Hexane	86.18	[110-54-3]	neat		1	10mL
1240.7-K-ME	n-Heptane	100.21	[142-82-5]	1000µg/mL	methanol	1	1mL
1240.7-10ML	n-Heptane	100.21	[142-82-5]	neat		1	10mL
1242.8-K-ME	n-Octane	114.23	[111-65-9]	1000µg/mL	methanol	1	1mL
1242.8-10ML	n-Octane	114.23	[111-65-9]	neat		1	10mL
1245.9-K-IO	n-Nonane	128.26	[111-84-2]	1000µg/mL	isooctane	1	1mL
1245.9-10ML	n-Nonane	128.26	[111-84-2]	neat		1	10mL
1875.10-K-IO	n-Decane	142.29	[124-18-5]	1000µg/mL	isooctane	1	1mL
1875.10-10ML	n-Decane	142.29	[124-18-5]	neat		1	10mL
1131.11-K-IO	n-Undecane	156.31	[1120-21-4]	1000µg/mL	isooctane	1	1mL
1131.11-10MG	n-Undecane	156.31	[1120-21-4]	neat		1	10mg
1132.12-K-IO	n-Dodecane	170.34	[112-40-5]	1000µg/mL	isooctane	1	1mL
1132.12-10MG	n-Dodecane	170.34	[112-40-5]	neat		1	10mg
1133.13-K-IO	n-Tridecane	184.37	[629-50-5]	1000µg/mL	isooctane	1	1mL
1133.13-10MG	n-Tridecane	184.37	[629-50-5]	neat		1	10mg
1134.14-K-IO	n-Tetradecane	198.40	[629-59-4]	1000µg/mL	isooctane	1	1mL
1134.14-10MG	n-Tetradecane	198.40	[629-59-4]	neat		1	10mg
1135.15-K-IO	n-Pentadecane	212.42	[629-62-9]	1000µg/mL	isooctane	1	1mL
1135.15-10MG	n-Pentadecane	212.42	[629-62-9]	neat		1	10mg
1136.16-K-IO	n-Hexadecane	226.45	[544-76-3]	1000µg/mL	isooctane	1	1mL
1136.16-10MG	n-Hexadecane	226.45	[544-76-3]	neat		1	10mg
1137.17-K-IO	n-Heptadecane	240.48	[629-78-7]	1000µg/mL	isooctane	1	1mL
1137.17-10MG	n-Heptadecane	240.48	[629-78-7]	neat		1	10mg
1138.18-K-IO	n-Octadecane	254.50	[593-45-3]	1000µg/mL	isooctane	1	1mL
1138.18-10MG	n-Octadecane	254.50	[593-45-3]	neat		1	10mg
1139.19-K-IO	n-Nonadecane	268.53	[629-92-5]	1000µg/mL	isooctane	1	1mL
1139.19-10MG	n-Nonadecane	268.53	[629-92-5]	neat		1	10mg
1140.20-K-IO	n-Eicosane	282.56	[112-95-8]	1000µg/mL	isooctane	1	1mL
1140.20-10MG	n-Eicosane	282.56	[112-95-8]	neat		1	10mg
1141.21-K-IO	n-Heneicosane	296.58	[629-94-7]	1000µg/mL	isooctane	1	1mL
1141.21-10MG	n-Heneicosane	296.58	[629-94-7]	neat		1	10mg
1142.22-K-IO	n-Docosane	310.61	[629-97-0]	1000µg/mL	isooctane	1	1mL
1142.22-10MG	n-Docosane	310.61	[629-97-0]	neat		1	10mg
1143.23-K-IO	n-Tricosane	324.64	[638-67-5]	1000µg/mL	isooctane	1	1mL
1143.23-10MG	n-Tricosane	324.64	[638-67-5]	neat		1	10mg
1144.24-K-IO	n-Tetracosane	338.67	[646-31-1]	1000µg/mL	isooctane	1	1mL
1144.24-10MG	n-Tetracosane	338.67	[646-31-1]	neat		1	10mg
1145.25-K-IO	n-Pentacosane	352.69	[629-99-2]	1000µg/mL	isooctane	1	1mL
1145.25-10MG	n-Pentacosane	352.69	[629-99-2]	neat		1	10mg
1146.26-K-IO	n-Hexacosane	366.72	[630-01-3]	1000µg/mL	isooctane	1	1mL
1146.26-10MG	n-Hexacosane	366.72	[630-01-3]	neat		1	10mg

1147.27-K-IO	n-Heptacosane	380.75	[593-49-7]	1000µg/mL	isooctane	1	1mL
1147.27-10MG	n-Heptacosane	380.75	[593-49-7]	neat		1	10mg
1148.28-K-IO	n-Octacosane	394.77	[630-02-4]	1000µg/mL	isooctane	1	1mL
1148.28-10MG	n-Octacosane	394.77	[630-02-4]	neat		1	10mg
1149.29-K-IO	n-Nonacosane	408.80	[630-05-5]	1000µg/mL	isooctane	1	1mL
1149.29-10MG	n-Nonacosane	408.80	[630-05-5]	neat		1	10mg
1150.30-K-IO	n-Triacontane	422.83	[638-68-6]	1000µg/mL	isooctane	1	1mL
1150.30-10MG	n-Triacontane	422.83	[638-68-6]	neat		1	10mg
1151.31-K-IO	n-Hentriacontane	436.86	[630-04-6]	1000µg/mL	isooctane	1	1mL
1151.31-10MG	n-Hentriacontane	436.86	[630-04-6]	neat		1	10mg
1152.32-K-IO	n-Dotriacontane	450.88	[544-85-4]	1000µg/mL	isooctane	1	1mL
1152.32-10MG	n-Dotriacontane	450.88	[544-85-4]	neat		1	10mg
1153.33-K-IO	n-Triatriacontane	464.91	[630-05-7]	1000µg/mL	isooctane	1	1mL
1153.33-10MG	n-Triatriacontane	464.91	[630-05-7]	neat		1	10mg
1154.34-K-IO	n-Tetratriacontane	478.94	[14167-59-0]	1000µg/mL	isooctane	1	1mL
1154.34-10MG	n-Tetratriacontane	478.94	[14167-59-0]	neat		1	10mg
1155.35-K-IO	n-Pentatriacontane	492.96	[630-07-9]	1000µg/mL	isooctane	1	1mL
1155.35-10MG	n-Pentatriacontane	492.96	[630-07-9]	neat		1	10mg
1156.36-100-IO	n-Hexatriacontane	506.99	[630-06-8]	100µg/mL	isooctane	1	1mL
1156.36-10MG	n-Hexatriacontane	506.99	[630-06-8]	neat		1	10mg
1157.37-100-IO	n-Heptatriacontane	521.02	[7194-84-5]	100µg/mL	isooctane	1	1mL
1157.37-10MG	n-Heptatriacontane	521.02	[7194-84-5]	neat		1	10mg
1158.38-100-IO	n-Octatriacontane	535.05	[7194-85-6]	100µg/mL	isooctane	1	1mL
1158.38-10MG	n-Octatriacontane	535.05	[7194-85-6]	neat		1	10mg
1159.39-100-IO	n-Nonatriacontane	549.07	[7194-86-7]	100µg/mL	isooctane	1	1mL
1159.39-10MG	n-Nonatriacontane	549.07	[7194-86-7]	neat		1	10mg
1160.40-100-IO	n-Tetracontane	563.10	[4181-95-7]	100µg/mL	isooctane	1	1mL
1160.40-10MG	n-Tetracontane	563.10	[4181-95-7]	neat		1	10mg
2180.41-10MG	n-Hentetracontane	577.13	[7194-87-8]	neat		1	10mg
2181.42-10MG	n-Dotetracontane	591.15	[7098-20-6]	neat		1	10mg
1247.44-10MG	n-Tetratetracontane	619.21	[7098-22-8]	neat		1	10mg
0997.46-10MG	n-Hexatetracontane	647.26	[7098-24-0]	neat		1	10mg
2182.48-10MG	n-Octatetracontane	675.32	[7098-26-2]	neat		1	10mg
2183.52-10MG	n-Dopentacontane	731.42	[7719-79-1]	neat		1	10mg
2184.54-10MG	n-Tetrapentacontane	759.48	[5856-66-6]	neat		1	10mg
2185.56-10MG	n-Hexapentacontane	787.53	[7719-82-6]	neat		1	10mg
0999.60-10MG	n-Hexacontane	843.64	[7667-80-3]	neat		1	10mg
1901.45-KIT	n-Alkane Kit (solutions when available/else neat)						Kit

2-Methylalkanes (isoalkanes)

1231.5-1ML	2-Methylbutane	72.15	[78-78-4]	neat		1	1mL
1235.6-1ML	2-Methylpentane	86.18	[107-83-5]	neat		1	1mL
1238.7-1ML	2-Methylhexane	100.21	[591-76-4]	neat		1	1mL
1243.8-1ML	2-Methylheptane	114.23	[592-27-8]	neat		1	1mL
0958.9-K-CY	2-Methyloctane	128.26	[3221-61-2]	1000µg/mL	cyclohexane	1	1mL
0958.9-100MG	2-Methyloctane	128.26	[3221-61-2]	neat		1	100mg
0959.10-K-CY	2-Methylnonane	142.29	[871-83-0]	1000µg/mL	cyclohexane	1	1mL
0959.10-100MG	2-Methylnonane	142.29	[871-83-0]	neat		1	100mg
0962.11-K-IO	2-Methyldecane	156.31	[6975-98-0]	1000µg/mL	isooctane	1	1mL
0962.11-100MG	2-Methyldecane	156.31	[6975-98-0]	neat		1	100mg
1162.12-K-IO	2-Methylundecane	170.34	[7045-71-8]	1000µg/mL	isooctane	1	1mL
3596.15-K-IO	2-Methyltetradecane	212.41	[1560-95-8]	1000µg/mL	isooctane	1	1mL
0941.18-K-IO	2-Methylheptadecane	254.50	[1560-89-0]	1000µg/mL	isooctane	1	1mL
0942.19-K-IO	2-Methyloctadecane	268.53	[1560-88-9]	1000µg/mL	isooctane	1	1mL
0927.20-K-IO	2-Methylnonadecane	282.56	[1560-86-7]	1000µg/mL	isooctane	1	1mL
0928.21-K-IO	2-Methyleicosane	296.58	[1560-84-5]	1000µg/mL	isooctane	1	1mL
1494.22-K-IO	2-Methylheneicosane	310.61	[1560-82-3]	1000µg/mL	isooctane	1	1mL
1496.23-K-IO	2-Methyldocosane	324.64	[1560-81-2]	1000µg/mL	isooctane	1	1mL
1497.24-K-IO	2-Methyltricosane	338.67	[1928-30-9]	1000µg/mL	isooctane	1	1mL
0395.26-K-IO	2-Methylpentacosane	366.72	[629-87-8]	1000µg/mL	isooctane	1	1mL
0966.17-KIT	2-Methylalkane Kit						Kit

3-Methylalkanes (anteisoalkanes)

1236.6-1ML	3-Methylpentane	86.18	[96-14-0]	neat		1	1mL
1257.7-1ML	3-Methylhexane	100.21	[589-34-4]	neat		1	1mL
1872.8-1ML	3-Methylheptane	114.23	[589-81-1]	neat		1	1mL
0963.9-K-CY	3-Methyloctane	128.26	[2216-33-3]	1000µg/mL	cyclohexane	1	1mL
0963.9-100MG	3-Methyloctane	128.26	[2216-33-3]	neat		1	100mg
0964.10-K-CY	3-Methylnonane	142.29	[5911-04-6]	1000µg/mL	cyclohexane	1	1mL
0964.10-100MG	3-Methylnonane	142.29	[5911-04-6]	neat		1	100mg
0905.11-K-IO	3-Methyldecane	156.31	[13151-34-3]	1000µg/mL	isooctane	1	1mL
0905.11-10MG	3-Methyldecane	156.31	[13151-34-3]	neat		1	10mg
1498.12-K-IO	3-Methylundecane	170.34	[1002-43-3]	1000µg/mL	isooctane	1	1mL
3597.14-K-IO	3-Methyltridecane	195.36	[6418-41-3]	1000µg/mL	isooctane	1	1mL
3598.16-K-IO	3-Methylpentadecane	226.44	[2882-96-4]	1000µg/mL	isooctane	1	1mL
0943.18-K-IO	3-Methylheptadecane	254.50	[6418-44-6]	1000µg/mL	isooctane	1	1mL
0944.19-K-IO	3-Methyloctadecane	268.53	[6561-44-0]	1000µg/mL	isooctane	1	1mL
0945.20-K-IO	3-Methylnonadecane	282.56	[6418-45-7]	1000µg/mL	isooctane	1	1mL
0967.12-KIT	3-Methylalkane Kit						Kit

Other isoalkanes

1873.8-K-CY	4-Methylheptane	114.23	[589-53-7]	1000µg/mL	cyclohexane	1	1mL
1874.9-K-CY	4-Methyloctane	128.26	[2216-34-4]	1000µg/mL	cyclohexane	1	1mL
1331.10-K-IO	4-Methylnonane	142.29	[17301-94-9]	1000µg/mL	isooctane	1	1mL
1332.10-K-IO	5-Methylnonane	142.29	[15869-85-9]	1000µg/mL	isooctane	1	1mL
1172.11-K-IO	4-Methyldecane	156.31	[2847-72-5]	1000µg/mL	isooctane	1	1mL
1499.13-K-IO	4-Methyldodecane	184.37	[6117-97-1]	1000µg/mL	isooctane	1	1mL
3599.14-K-IO	4-Methyltridecane	195.36	[26730-12-1]	1000µg/mL	isooctane	1	1mL
3600.15-K-IO	4-Methyltetradecane	212.00	[25117-24-2]	1000µg/mL	isooctane	1	1mL
3601.17-K-IO	4-Methylhexadecane	240.00	[25117-26-4]	1000µg/mL	isooctane	1	1mL
1171.20-K-IO	10-Methylnonadecane	282.56	[56862-62-5]	1000µg/mL	isooctane	1	1mL
2981.10-KIT	Other Isoalkane Kit						Kit

Additional Isoalkanes: Please inquire for custom synthesis

Isoprenoids, head-to-tail

1246.9-K-CY	2,6-Dimethylheptane	128.26	[1072-05-5]	1000µg/mL	cyclohexane	1	1mL
0634.10-K-IO	2,6-Dimethyloctane	142.29	[2051-30-1]	1000µg/mL	isooctane	1	1mL
0926.13-K-IO	2,6-Dimethylundecane	184.37	[17301-23-4]	1000µg/mL	isooctane	1	1mL
0437.14-K-IO	2,6,10-Trimethylundecane	198.40	[6864-53-5]	1000µg/mL	isooctane	1	1mL
0627.15-K-IO	2,6,10-Trimethyldodecane Farnesane	212.42	[3891-98-3]	1000µg/mL	isooctane	1	1mL
0628.18-K-IO	2,6,10-Trimethylpentadecane	254.50	[3892-00-0]	1000µg/mL	isooctane	1	1mL
0635.19-K-IO	2,6,10,14-Tetramethylpentadecane Pristane	268.53	[1921-70-6]	1000µg/mL	isooctane	1	1mL
0629.20-K-IO	2,6,10,14-Tetramethylhexadecane Phytane	282.56	[638-36-8]	1000µg/mL	isooctane	1	1mL
0630.21-K-IO	2,6,10,14-Tetramethylheptadecane	296.58	[18344-37-1]	1000µg/mL	isooctane	1	1mL
0631.22-K-IO	2,6,10,14-Tetramethyloctadecane	310.61	[54964-82-8]	1000µg/mL	isooctane	1	1mL
0632.23-K-IO	2,6,10,14-Tetramethylnonadecane	324.64	[55124-80-6]	1000µg/mL	isooctane	1	1mL
0633.25-K-IO	2,6,10,14,18-Pentamethylheneicosane	352.69	[66519-77-5]	1000µg/mL	isooctane	1	1mL
0636.12-KIT	Head-to-tail Isoprenoid Kit						Kit

Isoprenoids, tail-to-tail

0455.15-K-IO	2,6,11-Trimethyldodecane	212.42	[31295-56-4]	1000µg/mL	isooctane	1	1mL
0651.20-K-IO	2,6,11,15-Tetramethylhexadecane Crocetane	282.56	[504-44-9]	1000µg/mL	isooctane	1	1mL
0655.30-K-IO	Squalene	410.73	[111-02-4]	1000µg/mL	isooctane	1	1mL
0652.30-K-IO	Squalane	422.83	[111-01-3]	1000µg/mL	isooctane	1	1mL
0654.40-500-IO	ββ-Carotane	559.07	[17161-33-0]	500µg/mL	isooctane	1	1mL
0653.40-500-IO	Lycopane	563.10	[45316-02-7]	500µg/mL	isooctane	1	1mL
0660.6-KIT	Tail-to-tail Isoprenoids Kit						Kit

Botryococcanes

0624.32-K-IO	Botryococcane C30-C32		[100664-65-1 /] [100664-66-2 / -]	1000µg/mL	isooctane	1	1mL
0626.34-K-IO	Botryococcane C32-C34		[76060-38-3]	1000µg/mL	isooctane	1	1mL
0625.33-K-IO	Botryococcane C33	464.91	[100664-68-4]	1000µg/mL	isooctane	1	1mL
0644.5-KIT	Botryococcane Kit						Kit

Paraffins C5-C60 complete

C5-C6 Paraffins (alkanes)

1299.5-10ML	n-Pentane	72.15	[109-66-0]	neat		1	10mL
1231.5-1ML	2-Methylbutane	72.15	[78-78-4]	neat		1	1mL
1232.6-10ML	n-Hexane	86.18	[110-54-3]	neat		1	10mL
1235.6-1ML	2-Methylpentane	86.18	[107-83-5]	neat		1	1mL
1236.6-1ML	3-Methylpentane	86.18	[96-14-0]	neat		1	1mL
1234.6-1ML	2,2-Dimethylbutane	86.18	[75-83-2]	neat		1	1mL
1233.6-1ML	2,3-Dimethylbutane	86.18	[79-29-8]	neat		1	1mL
3526.7-KIT	C5-C6 Alkane Kit						Kit

C7-C8 Paraffins (alkanes)

1240.7-10ML	n-Heptane	100.21	[142-82-5]	neat		1	10mL
1238.7-1ML	2-Methylhexane	100.21	[591-76-4]	neat		1	1mL
1257.7-1ML	3-Methylhexane	100.21	[589-34-4]	neat		1	1mL
1255.7-1ML	3-Ethylpentane	100.21	[617-78-7]	neat		1	1mL
1237.7-1ML	2,2-Dimethylpentane	100.21	[590-35-2]	neat		1	1mL
1239.7-1ML	2,3-Dimethylpentane	100.21	[565-59-3]	neat		1	1mL
1241.7-1ML	2,4-Dimethylpentane	100.21	[108-08-7]	neat		1	1mL
1305.7-1ML	3,3-Dimethylpentane	100.21	[562-49-2]	neat		1	1mL
1242.8-10ML	n-Octane	114.23	[111-65-9]	neat		1	10mL
1243.8-K-ME	2-Methylheptane	114.23	[592-27-8]	1000µg/mL	methanol	1	1mL
1872.8-K-ME	3-Methylheptane	114.23	[589-81-1]	1000µg/mL	methanol	1	1mL
1873.8-K-ME	4-Methylheptane	114.23	[589-53-7]	1000µg/mL	methanol	1	1mL
2986.8-K-ME	2,2-Dimethylhexane	114.23	[590-73-8]	1000µg/mL	methanol	1	1mL
2983.8-K-ME	2,3-Dimethylhexane	114.23	[584-94-1]	1000µg/mL	methanol	1	1mL
2984.8-K-ME	2,4-Dimethylhexane	114.23	[589-43-5]	1000µg/mL	methanol	1	1mL
2985.8-K-ME	2,5-Dimethylhexane	114.23	[592-13-2]	1000µg/mL	methanol	1	1mL
2987.8-K-ME	3,3-Dimethylhexane	114.23	[563-16-6]	1000µg/mL	methanol	1	1mL
2988.8-K-ME	3,4-Dimethylhexane	114.23	[583-48-2]	1000µg/mL	methanol	1	1mL
0443.8-K-ME	2,2,4-Trimethylpentane Isooctane	114.23	[540-84-1]	1000µg/mL	methanol	1	1mL
3248.8-K-ME	2,3,3-Trimethylpentane	114.23	[560-21-4]	1000µg/mL	methanol	1	1mL
2989.8-K-ME	2,3,4-Trimethylpentane	114.23	[565-75-3]	1000µg/mL	methanol	1	1mL
3527.21-KIT	C7-C8 Alkane Kit						Kit

C9 Paraffins (alkanes)

1245.9-10ML	n-Nonane	128.26	[111-84-2]	neat		1	10mL
0958.9-K-CY	2-Methyloctane	128.26	[3221-61-2]	1000µg/mL	cyclohexane	1	1mL
0958.9-100MG	2-Methyloctane	128.26	[3221-61-2]	neat		1	100mg
0963.9-K-CY	3-Methyloctane	128.26	[2216-33-3]	1000µg/mL	cyclohexane	1	1mL
0963.9-100MG	3-Methyloctane	128.26	[2216-33-3]	neat		1	100mg
1874.9-K-CY	4-Methyloctane	128.26	[2216-34-4]	1000µg/mL	cyclohexane	1	1mL
2990.9-K-CY	2,2-Dimethylheptane	128.26	[1071-26-7]	1000µg/mL	cyclohexane	1	1mL
2991.9-K-CY	2,3-Dimethylheptane	128.26	[3074-71-3]	1000µg/mL	cyclohexane	1	1mL
2992.9-K-CY	2,4-Dimethylheptane	128.26	[2213-23-2]	1000µg/mL	cyclohexane	1	1mL
2993.9-K-CY	2,5-Dimethylheptane	128.26	[2216-30-0]	1000µg/mL	cyclohexane	1	1mL
1246.9-K-CY	2,6-Dimethylheptane	128.26	[1072-05-5]	1000µg/mL	cyclohexane	1	1mL
2994.9-K-CY	3,3-Dimethylheptane	128.26	[4032-86-4]	1000µg/mL	cyclohexane	1	1mL

2995.9-K-CY	3,4-Dimethylheptane	128.26	[922-28-1]	1000µg/mL	cyclohexane	1	1mL
2996.9-K-CY	3,5-Dimethylheptane	128.26	[926-82-9]	1000µg/mL	cyclohexane	1	1mL
2997.9-K-CY	4,4-Dimethylheptane	128.26	[1068-19-5]	1000µg/mL	cyclohexane	1	1mL
2998.9-K-CY	2,2,3-Trimethylhexane	128.26	[16747-25-4]	1000µg/mL	cyclohexane	1	1mL
3304.9-K-CY	2,2,4-Trimethylhexane	128.26	[16747-26-5]	1000µg/mL	cyclohexane	1	1mL
2999.9-K-CY	2,2,5-Trimethylhexane	128.26	[3522-94-9]	1000µg/mL	cyclohexane	1	1mL
3000.9-K-CY	2,3,3-Trimethylhexane	128.26	[16747-28-7]	1000µg/mL	cyclohexane	1	1mL
3001.9-K-CY	2,3,4-Trimethylhexane	128.26	[921-47-1]	1000µg/mL	cyclohexane	1	1mL
3002.9-K-CY	2,3,5-Trimethylhexane	128.26	[1069-53-0]	1000µg/mL	cyclohexane	1	1mL
3003.9-K-CY	2,4,4-Trimethylhexane	128.26	[16747-30-1]	1000µg/mL	cyclohexane	1	1mL
3004.9-K-CY	3,3,4-Trimethylhexane	128.26	[16747-31-2]	1000µg/mL	cyclohexane	1	1mL
3528.21-KIT	C9 Alkane Kit						Kit

C10 Paraffins (alkanes)

1875.10-10ML	n-Decane	142.29	[124-18-5]	neat		1	10mL
0959.10-K-CY	2-Methylnonane	142.29	[871-83-0]	1000µg/mL	cyclohexane	1	1mL
0959.10-100MG	2-Methylnonane	142.29	[871-83-0]	neat		1	100mg
0964.10-K-CY	3-Methylnonane	142.29	[5911-04-6]	1000µg/mL	cyclohexane	1	1mL
0964.10-100MG	3-Methylnonane	142.29	[5911-04-6]	neat		1	100mg
1331.10-K-IO	4-Methylnonane	142.29	[17301-94-9]	1000µg/mL	isooctane	1	1mL
1332.10-K-IO	5-Methylnonane	142.29	[15869-85-9]	1000µg/mL	isooctane	1	1mL
3005.10-K-IO	2,3-Dimethyloctane	142.29	[7146-60-3]	1000µg/mL	isooctane	1	1mL
0634.10-K-IO	2,6-Dimethyloctane	142.29	[2051-30-1]	1000µg/mL	isooctane	1	1mL
3006.10-K-IO	2,7-Dimethyloctane	142.29	[1072-16-8]	1000µg/mL	isooctane	1	1mL
3009.10-K-IO	3,3-Dimethyloctane	142.29	[4110-44-5]	1000µg/mL	isooctane	1	1mL
3007.10-K-IO	3,5-Dimethyloctane	142.29	[15869-93-9]	1000µg/mL	isooctane	1	1mL
3008.10-K-IO	3,6-Dimethyloctane	142.29	[15869-94-0]	1000µg/mL	isooctane	1	1mL
3010.10-K-IO	4,4-Dimethyloctane	142.29	[15869-95-1]	1000µg/mL	isooctane	1	1mL
3011.10-K-IO	4,5-Dimethyloctane	142.29	[15869-96-2]	1000µg/mL	isooctane	1	1mL
3012.10-K-IO	2,4,6-Trimethylheptane	142.29	[2613-61-8]	1000µg/mL	isooctane	1	1mL
3013.10-K-IO	3,3,5-Trimethylheptane	142.29	[7154-80-5]	1000µg/mL	isooctane	1	1mL
3014.10-K-IO	3,4,5-Trimethylheptane	142.29	[20278-89-1]	1000µg/mL	isooctane	1	1mL
3529.16-KIT	C10 Alkane Kit						Kit
1877.66-KIT	C5-C10 Paraffin Kit						Kit

C11-C15 Paraffins (alkanes)

1131.11-K-IO	n-Undecane	156.31	[1120-21-4]	1000µg/mL	isooctane	1	1mL
0962.11-K-IO	2-Methyldecane	156.31	[6975-98-0]	1000µg/mL	isooctane	1	1mL
0905.11-K-IO	3-Methyldecane	156.31	[13151-34-3]	1000µg/mL	isooctane	1	1mL
1172.11-K-IO	4-Methyldecane	156.31	[2847-72-5]	1000µg/mL	isooctane	1	1mL
1130.11-K-IO	3-Ethylnonane	156.31	[17302-11-3]	1000µg/mL	isooctane	1	1mL
1161.11-K-IO	2,2,6,6-Tetramethylheptane	156.31	[40117-45-1]	1000µg/mL	isooctane	1	1mL
1132.12-K-IO	n-Dodecane	170.34	[112-40-5]	1000µg/mL	isooctane	1	1mL
1162.12-K-IO	2-Methylundecane	170.34	[7045-71-8]	1000µg/mL	isooctane	1	1mL
1498.12-K-IO	3-Methylundecane	170.34	[1002-43-3]	1000µg/mL	isooctane	1	1mL
1163.12-K-IO	2,3-Dimethyldecane	170.34	[17312-44-6]	1000µg/mL	isooctane	1	1mL
1164.12-K-IO	2,6-Dimethyldecane	170.34	[13150-81-7]	1000µg/mL	isooctane	1	1mL
1165.12-K-IO	2,2,4,4-Tetramethyloctane	170.34	[62183-79-3]	1000µg/mL	isooctane	1	1mL
1166.12-K-IO	2,2,7,7-Tetramethyloctane	170.34	[1071-31-4]	1000µg/mL	isooctane	1	1mL
1167.12-K-IO	2,2,4,6,6-Pentamethylheptane	170.34	[13475-82-6]	1000µg/mL	isooctane	1	1mL
1133.13-K-IO	n-Tridecane	184.37	[629-50-5]	1000µg/mL	isooctane	1	1mL
1499.13-K-IO	4-Methyldodecane	184.37	[6117-97-1]	1000µg/mL	isooctane	1	1mL
0926.13-K-IO	2,6-Dimethylundecane	184.37	[17301-23-4]	1000µg/mL	isooctane	1	1mL
1134.14-K-IO	n-Tetradecane	198.00	[629-59-4]	1000µg/mL	isooctane	1	1mL
3597.14-K-IO	3-Methyltridecane	198.00	[6418-41-3]	1000µg/mL	isooctane	1	1mL
3599.14-K-IO	4-Methyltridecane	198.40	[26730-12-1]	1000µg/mL	isooctane	1	1mL
0437.14-K-IO	2,6,10-Trimethylundecane	198.40	[6864-53-5]	1000µg/mL	isooctane	1	1mL
1135.15-K-IO	n-Pentadecane	212.00	[629-62-9]	1000µg/mL	isooctane	1	1mL
3596.15-K-IO	2-Methyltetradecane	212.00	[1560-95-8]	1000µg/mL	isooctane	1	1mL
3600.15-K-IO	4-Methyltetradecane	212.00	[25117-24-2]	1000µg/mL	isooctane	1	1mL
0627.15-K-IO	2,6,10-Trimethyldodecane Farnesane	212.00	[3891-98-3]	1000µg/mL	isooctane	1	1mL

0455.15-K-IO	2,6,11-Trimethyldodecane	212.00	[31295-56-4]	1000µg/mL	isooctane	1	1mL
1173.26-KIT	C11-C15 Paraffin Kit						Kit

C16-C20 Paraffins (alkanes)

1136.16-K-IO	n-Hexadecane	226.45	[544-76-3]	1000µg/mL	isooctane	1	1mL
3598.16-K-IO	3-Methylpentadecane	226.00	[2882-96-4]	1000µg/mL	isooctane	1	1mL
2686.16-K-IO	2,2,4,4,6,8,8-Heptamethylnonane	226.45	[4390-04-9]	1000µg/mL	isooctane	1	1mL
1169.16-K-IO	2,2,4,4,5,5,7,7-Octamethyloctane	226.45	[5171-85-7]	1000µg/mL	isooctane	1	1mL
1137.17-K-IO	n-Heptadecane	240.48	[629-78-7]	1000µg/mL	isooctane	1	1mL
3601.17-K-IO	4-Methylhexadecane	240.00	[25117-26-4]	1000µg/mL	isooctane	1	1mL
1170.17-K-IO	5,5-Dibutylnonane	240.48	[6008-17-9]	1000µg/mL	isooctane	1	1mL
1138.18-K-IO	n-Octadecane	254.50	[593-45-3]	1000µg/mL	isooctane	1	1mL
0941.18-K-IO	2-Methylheptadecane	254.50	[1560-89-0]	1000µg/mL	isooctane	1	1mL
0943.18-K-IO	3-Methylheptadecane	254.50	[6418-44-6]	1000µg/mL	isooctane	1	1mL
0628.18-K-IO	2,6,10-Trimethylpentadecane	254.50	[3892-00-0]	1000µg/mL	isooctane	1	1mL
1139.19-K-IO	n-Nonadecane	268.53	[629-92-5]	1000µg/mL	isooctane	1	1mL
0942.19-K-IO	2-Methyloctadecane	268.53	[1560-88-9]	1000µg/mL	isooctane	1	1mL
0944.19-K-IO	3-Methyloctadecane	268.53	[6561-44-0]	1000µg/mL	isooctane	1	1mL
0635.19-K-IO	2,6,10,14,18-Tetramethylpentadecane Pristane	268.53	[1921-70-6]	1000µg/mL	isooctane	1	1mL
1140.20-K-IO	n-Eicosane	282.56	[112-95-8]	1000µg/mL	isooctane	1	1mL
0927.20-K-IO	2-Methylnonadecane	282.56	[1560-86-7]	1000µg/mL	isooctane	1	1mL
0945.20-K-IO	3-Methylnonadecane	282.56	[6418-45-7]	1000µg/mL	isooctane	1	1mL
1171.20-K-IO	10-Methylnonadecane	282.56	[56862-62-5]	1000µg/mL	isooctane	1	1mL
0629.20-K-IO	2,6,10,14,18-Tetramethylhexadecane Phytane	282.56	[638-36-8]	1000µg/mL	isooctane	1	1mL
0651.20-K-IO	2,6,11,15-Tetramethylhexadecane Crocetane	282.56	[504-44-9]	1000µg/mL	isooctane	1	1mL
1174.21-KIT	C16-C20 Paraffin Kit						Kit

C21-C25 Paraffins (alkanes)

1141.21-K-IO	n-Heneicosane	296.58	[629-94-7]	1000µg/mL	isooctane	1	1mL
0928.21-K-IO	2-Methyleicosane	296.58	[1560-84-5]	1000µg/mL	isooctane	1	1mL
0630.21-K-IO	2,6,10,14-Tetramethylheptadecane	296.58	[18344-37-1]	1000µg/mL	isooctane	1	1mL
1142.22-K-IO	n-Docosane	310.61	[629-97-0]	1000µg/mL	isooctane	1	1mL
1494.22-K-IO	2-Methylheneicosane	310.61	[1560-82-3]	1000µg/mL	isooctane	1	1mL
0631.22-K-IO	2,6,10,14-Tetramethyloctadecane	310.61	[54964-82-8]	1000µg/mL	isooctane	1	1mL
1143.23-K-IO	n-Tricosane	324.64	[638-67-5]	1000µg/mL	isooctane	1	1mL
1496.23-K-IO	2-Methyldocosane	324.64	[1560-81-2]	1000µg/mL	isooctane	1	1mL
0632.23-K-IO	2,6,10,14-Tetramethylnonadecane	324.64	[55124-80-6]	1000µg/mL	isooctane	1	1mL
1144.24-K-IO	n-Tetracosane	338.67	[646-31-1]	1000µg/mL	isooctane	1	1mL
1497.24-K-IO	2-Methyltricosane	338.67	[1928-30-9]	1000µg/mL	isooctane	1	1mL
1145.25-K-IO	n-Pentacosane	352.69	[629-99-2]	1000µg/mL	isooctane	1	1mL
1175.12-KIT	C21-C25 Paraffin Kit						Kit

C26-C30 Paraffins (alkanes)

1146.26-K-IO	n-Hexacosane	366.72	[630-01-3]	1000µg/mL	isooctane	1	1mL
0395.26-K-IO	2-Methylpentacosane	366.72	[629-87-8]	1000µg/mL	isooctane	1	1mL
1147.27-K-IO	n-Heptacosane	380.75	[593-49-7]	1000µg/mL	isooctane	1	1mL
1148.28-K-IO	n-Octacosane	394.77	[630-02-4]	1000µg/mL	isooctane	1	1mL
1149.29-K-IO	n-Nonacosane	408.80	[630-05-5]	1000µg/mL	isooctane	1	1mL
1150.30-K-IO	n-Triacontane	422.83	[638-68-6]	1000µg/mL	isooctane	1	1mL
0652.30-K-IO	Squalane	422.83	[111-01-3]	1000µg/mL	isooctane	1	1mL
0624.32-K-IO	Botryococcane C30-C32		[100664-65-1 /] [100664-66-2 / -]	1000µg/mL	isooctane	1	1mL
1176.10-KIT	C26-C30 Paraffin Kit						Kit

C31-C40 Paraffins (alkanes)

1151.31-K-IO	n-Hentriacontane	436.86	[630-04-6]	1000µg/mL	isooctane	1	1mL
0624.32-K-IO	Botryococcane C30-C32		[100664-65-1 /] [100664-66-2 / -]	1000µg/mL	isooctane	1	1mL
1152.32-K-IO	n-Dotriacontane	450.88	[544-85-4]	1000µg/mL	isooctane	1	1mL
1153.33-K-IO	n-Triatriacontane	464.91	[630-05-7]	1000µg/mL	isooctane	1	1mL
0625.33-K-IO	Botryococcane C33	464.91	[100664-68-4]	1000µg/mL	isooctane	1	1mL
0626.34-K-IO	Botryococcane C32-C34		[- /100664-68-4] [/76060-38-3]	1000µg/mL	isooctane	1	1mL
1154.34-K-IO	n-Tetratriacontane	478.94	[14167-59-0]	1000µg/mL	isooctane	1	1mL
1155.35-K-IO	n-Pentatriacontane	492.96	[630-07-9]	1000µg/mL	isooctane	1	1mL
1156.36-100-IO	n-Hexatriacontane	506.99	[630-06-8]	100µg/mL	isooctane	1	1mL
1157.37-100-IO	n-Heptatriacontane	521.02	[7194-84-5]	100µg/mL	isooctane	1	1mL
1158.38-100-IO	n-Octatriacontane	535.05	[7194-85-6]	100µg/mL	isooctane	1	1mL
1159.39-100-IO	n-Nonatriacontane	549.07	[7194-86-7]	100µg/mL	isooctane	1	1mL
1160.40-100-IO	n-Tetracontane	563.10	[4181-95-7]	100µg/mL	isooctane	1	1mL
0653.40-500-IO	Lycopane	563.10	[45316-02-7]	500µg/mL	isooctane	1	1mL
0654.40-500-IO	ββ-Carotane	559.07	[17161-33-0]	500µg/mL	isooctane	1	1mL
1177.17-KIT	C31-C40 Paraffin Kit (15 samples, 17 compounds)						Kit

C41-C60 Paraffins (alkanes)

2180.41-10MG	n-Hentetracontane	577.13	[7194-87-8]	neat		1	10mg
2181.42-10MG	n-Dotetracontane	591.15	[7098-20-6]	neat		1	10mg
1247.44-10MG	n-Tetratetracontane	619.21	[7098-22-8]	neat		1	10mg
0997.46-10MG	n-Hexatetracontane	647.26	[7098-24-0]	neat		1	10mg
2182.48-10MG	n-Octatetracontane	675.32	[7098-26-2]	neat		1	10mg
2183.52-10MG	n-Dopentacontane	731.42	[7719-79-1]	neat		1	10mg
2184.54-10MG	n-Tetrapentacontane	759.48	[5856-66-6]	neat		1	10mg
2185.56-10MG	n-Hexapentacontane	787.53	[7719-82-6]	neat		1	10mg
0999.60-10MG	n-Hexacontane	843.64	[7667-80-3]	neat		1	10mg
1878.9-KIT	C41-C60 Paraffin Kit						Kit

Alkenes

Alkenes

3015.5-1ML	1-Pentene	70.14	[109-67-1]	neat		1	1mL
3016.5-1ML	cis-2-Pentene	70.14	[627-20-3]	neat		1	1mL
3017.5-1ML	trans-2-Pentene	70.14	[646-04-8]	neat		1	1mL
2643.5-1ML	2-Methyl-1-butene	70.14	[563-46-2]	neat		1	1mL
3018.5-1ML	2-Methyl-2-butene	70.14	[513-35-9]	neat		1	1mL
3019.5-1ML	3-Methyl-1-butene	70.14	[563-45-1]	neat		1	1mL
2649.6-1ML	1-Hexene	84.16	[592-41-6]	neat		1	1mL
3020.6-1ML	cis-2-Hexene	84.16	[7688-21-3]	neat		1	1mL
3021.6-1ML	trans-2-Hexene	84.16	[4050-45-7]	neat		1	1mL
2681.6-1ML	2-Methyl-2-pentene	84.16	[625-27-4]	neat		1	1mL
2651.6-1ML	4-Methyl-1-pentene	84.16	[691-37-2]	neat		1	1mL
3023.6-1ML	4-Methyl-cis-2-pentene	84.16	[691-38-3]	neat		1	1mL
2684.7-1ML	1-Heptene	98.19	[592-76-7]	neat		1	1mL
3024.7-1ML	cis-2-Heptene	98.19	[6442-92-1]	neat		1	1mL
3025.7-1ML	trans-2-Heptene	98.19	[14686-13-6]	neat		1	1mL
3026.7-1ML	cis-3-Heptene	98.19	[7642-10-6]	neat		1	1mL
3027.7-1ML	trans-3-Heptene	98.19	[14686-14-7]	neat		1	1mL
2683.7-1ML	5-Methyl-1-hexene	98.19	[3524-73-0]	neat		1	1mL
2648.8-1ML	1-Octene	112.22	[111-66-0]	neat		1	1mL
3028.8-100-ME	cis-2-Octene	112.22	[7642-04-8]	100µg/mL	methanol	1	1mL
3029.8-100-ME	trans-2-Octene	112.22	[13389-42-9]	100µg/mL	methanol	1	1mL
2644.8-100-ME	2-Methyl-1-heptene	112.22	[15870-10-7]	100µg/mL	methanol	1	1mL
1304.8-100-ME	3,5-Dimethyl-1-hexene	112.22	[7423-69-0]	100µg/mL	methanol	1	1mL

3035.8-100-ME	2,3,4-Trimethyl-2-pentene	112.22	[565-77-5]	100µg/mL	methanol	1	1mL
1244.8-100-ME	2,4,4-Trimethyl-1-pentene	112.22	[107-39-1]	100µg/mL	methanol	1	1mL
3036.8-100-ME	2,4,4-Trimethyl-2-pentene	112.22	[107-40-4]	100µg/mL	methanol	1	1mL
1303.8-100-ME	3,4,4-Trimethyl-trans-2-pentene	112.22	[598-96-4]	100µg/mL	methanol	1	1mL
2645.9-100-ME	1-Nonene	126.24	[124-11-8]	100µg/mL	methanol	1	1mL
3031.9-100-ME	cis-2-Nonene	126.24	[6434-77-1]	100µg/mL	methanol	1	1mL
3032.9-100-ME	trans-2-Nonene	126.24	[6434-78-2]	100µg/mL	methanol	1	1mL
3033.9-100-ME	cis-3-Nonene	126.24	[20237-46-1]	100µg/mL	methanol	1	1mL
3034.9-100-ME	trans-3-Nonene	126.24	[20063-92-7]	100µg/mL	methanol	1	1mL
2682.9-100-ME	2-Methyl-1-octene	126.24	[4588-18-5]	100µg/mL	methanol	1	1mL
2642.10-100-ME	1-Decene	140.27	[872-05-9]	100µg/mL	methanol	1	1mL
1307.12-100-ME	4,4-Dimethyl-2-neopentyl-1-pentene	168.33	[141-70-8]	100µg/mL	methanol	1	1mL
1922.35-KIT	Alkenes Kit (not including 3037.12)						Kit

Alkadienes

3038.5-1ML	2-Methyl-1,3-butadiene	Isoprene	68.12	[78-79-5]	neat	1	1mL
2692.6-1ML	3-Methyl-1,3-pentadiene		82.15	[4549-74-0]	neat	1	1mL
2669.6-1ML	1,5-Hexadiene		82.15	[592-42-7]	neat	1	1mL

Cyclic hydrocarbons including alkylbenzenes and hydroPAHs

For Cyclic isoprenoids, see page 238 and onward
For PAHs, see page 295 and onward

Monocyclic compounds

C0-C2 Alkylcyclopentanes

NEW

1250.5-1ML	Cyclopentane	70.14	[287-92-3]	neat		1	1mL
1249.6-1ML	Methylcyclopentane	84.16	[96-37-7]	neat		1	1mL
1302.7-1ML	1,1-Dimethylcyclopentane	98.19	[1638-26-2]	neat		1	1mL
1254.7-1ML	cis-1,2-Dimethylcyclopentane	98.19	[1192-18-3]	neat		1	1mL
1256.7-1ML	trans-1,2-Dimethylcyclopentane	98.19	[822-50-4]	neat		1	1mL
1252.7-1ML	cis-1,3-Dimethylcyclopentane	98.19	[2532-58-3]	neat		1	1mL
1253.7-1ML	trans-1,3-Dimethylcyclopentane	98.19	[1759-58-6]	neat		1	1mL
1251.7-1ML	Ethylcyclopentane	98.19	[1640-89-7]	neat		1	1mL
8104.8-KIT	C0-C2 Alkylcyclopentane Kit						Kit

C3-C4 Alkylcyclopentanes

NEW

1862.8-K-CY	1,1,3-Trimethylcyclopentane	112.22	[4516-69-2]	1000µg/mL	cyclohexane	1	1mL
3984.8-K-CY	tc-1,2,3-Trimethylcyclopentane	112.22	[15890-40-1]	1000µg/mL	cyclohexane	1	1mL
3988.8-K-CY	cc-1,2,3-Trimethylcyclopentane	112.22	[2613-69-6]	1000µg/mL	cyclohexane	1	1mL
3985.8-K-CY	ct-1,2,4-Trimethylcyclopentane	112.22	[4850-28-6]	1000µg/mL	cyclohexane	1	1mL
3986.8-K-CY	tc-1,2,4-Trimethylcyclopentane	112.22	[16883-48-0]	1000µg/mL	cyclohexane	1	1mL
3987.8-K-CY	1-Ethyl-1-methylcyclopentane	112.22	[16747-50-5]	1000µg/mL	cyclohexane	1	1mL
3990.8-K-CY	n-Propylcyclopentane	112.22	[2040-96-2]	1000µg/mL	cyclohexane	1	1mL
3989.8-K-CY	Isopropylcyclopentane	112.22	[3875-51-2]	1000µg/mL	cyclohexane	1	1mL
3998.9-K-CY	n-Butylcyclopentane	126.24	[2040-95-1]	1000µg/mL	cyclohexane	1	1mL
3996.9-K-CY	Isobutylcyclopentane	126.24	[3788-32-7]	1000µg/mL	cyclohexane	1	1mL
3849.10-KIT	C3-C4 Alkylcyclopentane Kit						Kit

C0-C2 Alkylcyclohexanes

NEW

1301.6-5ML	Cyclohexane	84.16	[110-82-7]	neat		1	5mL
1248.7-1ML	Methylcyclohexane	98.19	[108-87-2]	neat		1	1mL
1869.8-K-CY	1,1-Dimethylcyclohexane	112.22	[590-66-9]	1000µg/mL	cyclohexane	1	1mL
1867.8-K-CY	cis-1,2-Dimethylcyclohexane	112.22	[2207-01-4]	1000µg/mL	cyclohexane	1	1mL
1868.8-K-CY	trans-1,2-Dimethylcyclohexane	112.22	[6876-23-9]	1000µg/mL	cyclohexane	1	1mL
1863.8-K-CY	cis-1,3-Dimethylcyclohexane	112.22	[638-04-0]	1000µg/mL	cyclohexane	1	1mL
1864.8-K-CY	trans-1,3-Dimethylcyclohexane	112.22	[2207-03-6]	1000µg/mL	cyclohexane	1	1mL
1865.8-K-CY	cis-1,4-Dimethylcyclohexane	112.22	[624-29-3]	1000µg/mL	cyclohexane	1	1mL
1866.8-K-CY	trans-1,4-Dimethylcyclohexane	112.22	[2207-04-7]	1000µg/mL	cyclohexane	1	1mL
1258.8-K-CY	Ethylcyclohexane	112.22	[1678-91-7]	1000µg/mL	cyclohexane	1	1mL
3919.10-KIT	C0-C2 Cyclohexane Kit						Kit

C3 Alkylcyclohexanes

NEW

1259.9-K-CY	1,1,3-Trimethylcyclohexane	126.24	[3073-66-3]	1000µg/mL	cyclohexane	1	1mL
3991.9-K-CY	cc-1,3,5-Trimethylcyclohexane	126.24	[1795-26-2]	1000µg/mL	cyclohexane	1	1mL
3992.9-K-CY	1,1,4-Trimethylcyclohexane	126.24	[7094-27-1]	1000µg/mL	cyclohexane	1	1mL
3974.9-K-CY	cc-1,2,4-Trimethylcyclohexane	126.24	[1678-80-4]	1000µg/mL	cyclohexane	1	1mL
3993.9-K-CY	ct-1,2,4-Trimethylcyclohexane	126.24	[766-58-5]	1000µg/mL	cyclohexane	1	1mL
3994.9-K-CY	tc-1,2,4-Trimethhylcyclohexane	126.24	[7667-59-6]	1000µg/mL	cyclohexane	1	1mL
3995.9-K-CY	1,1,2-Trimethylcyclohexane	126.24	[7094-26-0]	1000µg/mL	cyclohexane	1	1mL
3920.6-KIT	C3 Alkylcyclohexane Kit						Kit

C0-C1 Alkylcyclohepanes

0442.7-1mL	Cycloheptane	98.19	[291-64-5]	neat		1	1mL
1870.8-K-CY	Methylcycloheptane	112.22	[4126-78-7]	1000µg/mL	cyclohexane	1	1mL
.2-KIT	C0-C2 Alkylcycloheptane Kit						Kit
1950.36-KIT	C0-C3 Alkylcycloalkane Kit						Kit

C4-C19 Alkylcycloalkanes

3039.10-K-CY	n-Butylcyclohexane	140.27	[1678-93-9]	1000µg/mL	cyclohexane	1	1mL
2284.11-K-IO	n-Pentylcyclohexane	154.30	[4292-92-6]	1000µg/mL	isooctane	1	1mL
2285.12-K-IO	n-Hexylcyclohexane	168.33	[4292-75-5]	1000µg/mL	isooctane	1	1mL
0991.13-100-IO	2-Methyl-1-hexylcyclohexane	182.35	[92031-89-5]	100µg/mL	isooctane	1	1mL
0992.13-K-IO	3-Methyl-1-hexylcyclohexane (cis+trans)	182.35	[52886-35-8]	1000µg/mL	isooctane	1	1mL
0990.13-K-IO	4-Methyl-1-hexylcyclohexane (cis+trans)	182.35	[92031-89-5]	1000µg/mL	isooctane	1	1mL
1044.13-K-IO	n-Heptylcyclohexane	182.35	[5617-41-4]	1000µg/mL	isooctane	1	1mL
0110.14-K-IO	n-Octylcyclohexane	196.38	[1795-15-9]	1000µg/mL	isooctane	1	1mL
1045.15-K-IO	n-Nonylcyclohexane	210.41	[2883-02-5]	1000µg/mL	isooctane	1	1mL
1046.16-K-IO	n-Decylcyclohexane	224.43	[1795-16-0]	1000µg/mL	isooctane	1	1mL
1071.17-K-IO	n-Undecylcyclohexane	238.46	[54105-66-7]	1000µg/mL	isooctane	1	1mL
1072.18-K-IO	n-Dodecylcyclohexane	252.49	[1795-17-1]	1000µg/mL	isooctane	1	1mL
1047.19-K-IO	n-Tridecylcyclohexane	266.51	[6006-33-3]	1000µg/mL	isooctane	1	1mL
1500.20-K-IO	n-Tetradecylcyclohexane	280.54	[1795-18-2]	1000µg/mL	isooctane	1	1mL
1073.21-K-IO	n-Pentadecylcyclohexane	294.57	[6006-95-7]	1000µg/mL	isooctane	1	1mL
1871.22-K-CY	n-Hexadecylcyclohexane	308.60	[6812-38-0]	1000µg/mL	cyclohexane	1	1mL
1074.23-K-IO	n-Heptadecylcyclohexane	322.62	[19781-73-8]	1000µg/mL	isooctane	1	1mL
1501.24-K-IO	n-Octadecylcyclohexane	336.65	[4445-06-1]	1000µg/mL	isooctane	1	1mL
1048.25-K-IO	n-Nonadecylcyclohexane	350.68	[22349-03-7]	1000µg/mL	isooctane	1	1mL
1953.19-KIT	C4-C19 Alkylcycloalkane Kit						Kit

Cycloalkanes, unsubstituted

1250.5-1ML	Cyclopentane	70.14	[287-92-3]	neat		1	1mL
1301.6-5ML	Cyclohexane	84.16	[110-82-7]	neat		1	5mL
0442.7-1G	Cycloheptane	98.19	[291-64-5]	neat		1	1g
3531.8-K-CY	Cyclooctane	112.21	[292-64-8]	1000µg/mL	cyclohexane	1	1mL
3532.12-K-IO	Cyclododecane	168.32	[294-62-2]	1000µg/mL	isooctane	1	1mL
3533.15-K-IO	Cyclopentadecane	210.40	[295-48-7]	1000µg/mL	isooctane	1	1mL
3534.6-KIT	Cycloalkane Kit						Kit

Fullerenes

2567.60-10MG	[5,6]Fullerene-C60	720.65	[99685-96-8]	neat		1	10mg
2568.70-10MG	[5,6]Fullerene-C70	840.77	[115383-22-7]	neat		1	10mg

Cycloalkenes

3040.5-1ML	Cyclopentene	68.11	[142-29-0]	neat		1	1mL
3284.6-1ML	1-Methylcyclopentene	82.15	[693-89-0]	neat		1	1mL
2650.6-1ML	Cyclohexene	82.15	[110-83-8]	neat		1	1mL
2733.12-1ML	trans, trans, cis-Cyclododeca-1,2,9-triene	162.28	[2765-29-9]	neat		1	1mL

F-BTEX internal standards

2017.6-1ML	Fluorobenzene	96.11	[462-06-6]	neat		1	1mL
2018.7-1ML	o-Fluorotoluene	110.13	[95-52-3]	neat		1	1mL
2019.7-1ML	m-Fluorotoluene	110.13	[352-70-5]	neat		1	1mL
2020.7-1ML	p-Fluorotoluene	110.13	[352-32-9]	neat		1	1mL
2010.12-500UL	1-Ethyl-4-fluorobenzene	124.16	[459-47-2]	neat		1	0,5mL
2021.8-500UL	3-Fluoro-o-xylene	124.16	[443-82-3]	neat		1	0,5mL
2022.8-500UL	4-Fluoro-o-xylene	124.16	[452-64-2]	neat		1	0,5mL
2048.7-10K-ME	ααα-Trifluorotoluene	146.11	[98-08-8]	10000µg/mL	methanol	1	1mL

	Calibration (Surrogate) Standard						
2048.7-10K-ME	ααα-Trifluorotoluene Calibration (Surrogate) Standard	146.11	[98-08-8]	10000µg/mL	methanol	5	1mL
3041.8-KIT	F-BTEX Kit						Kit

Deuterated BTEX internal standards

2203.6-K-ME	Benzene-d6	84.15	[1076-43-3]	1000µg/mL	methanol	1	1mL
2203.6-1ML	Benzene-d6	84.15	[1076-43-3]	neat		1	1mL
2253.7-5K-ME	Toluene-d8	100.19	[2037-26-5]	5000µg/mL	methanol	1	1mL
3042.8-K-ME	o-Xylene-d10	116.23	[56004-61-6]	1000µg/mL	methanol	1	1mL
3043.8-K-ME	m-Xylene-d10	116.23	[116601-58-2]	1000µg/mL	methanol	1	1mL
3044.8-K-ME	p-Xylene-d10	116.23	[41051-88-1]	1000µg/mL	methanol	1	1mL
2171.8-K-ME	Ethylbenzene-d10	116.23	[25837-05-2]	1000µg/mL	methanol	1	1mL

Deuterated alkylbenzenes

1854.10-K-IO	n-Butylbenzene-d14	148.31	[65087-59-4]	1000µg/mL	isooctane	1	1mL
3045.15-K-IO	n-Nonylbenzene-2,3,4,5,6-d5	209.39	[20216-93-7]	1000µg/mL	isooctane	1	1mL
1855.18-K-IO	n-Dodecylbenzene-d30	276.62	[352431-29-9]	1000µg/mL	isooctane	1	1mL
1856.21-K-IO	n-Pentadecylbenzene-d36	324.74	[352431-31-3]	1000µg/mL	isooctane	1	1mL

C0-C2 Alkylbenzenes (BTEX)

1300.6-K-ME	Benzene	78.11	[71-43-2]	1000µg/mL	methanol	1	1mL
1300.6-5ML	Benzene	78.11	[71-43-2]	neat		1	5mL
1264.7-K-ME	Toluene	92.14	[108-88-3]	1000µg/mL	methanol	1	1mL
1264.7-1ML	Toluene	92.14	[108-88-3]	neat		1	1mL
2558.8-K-ME	Styrene	104.15	[100-42-5]	1000µg/mL	methanol	1	1mL
2558.8-1ML	Styrene	104.15	[100-42-5]	neat		1	1mL
1267.8-K-ME	o-Xylene 1,2-Dimethylbenzene	106.17	[95-47-6]	1000µg/mL	methanol	1	1mL
1267.8-1ML	o-Xylene 1,2-Dimethylbenzene	106.17	[95-47-6]	neat		1	1mL
1266.8-K-ME	m-Xylene 1,3-Dimethylbenzene	106.17	[108-38-3]	1000µg/mL	methanol	1	1mL
1266.8-1ML	m-Xylene 1,3-Dimethylbenzene	106.17	[108-38-3]	neat		1	1mL
1266.8-5ML	m-Xylene 1,3-Dimethylbenzene	106.17	[108-38-3]	neat		1	5mL
1265.8-K-ME	p-Xylene 1,4-Dimethylbenzene	106.17	[106-42-3]	1000µg/mL	methanol	1	1mL
1265.8-1ML	p-Xylene 1,4-Dimethylbenzene	106.17	[106-42-3]	neat		1	1mL
1268.8-K-ME	Ethylbenzene	106.17	[100-41-4]	1000µg/mL	methanol	1	1mL
1268.8-1ML	Ethylbenzene	106.17	[100-41-4]	neat		1	1mL
1268.8-5ML	Ethylbenzene	106.17	[100-41-4]	neat		1	5mL
3046.7-KIT	BTEX Kit (C0-C2 Alkylbenzene Kit)						Kit

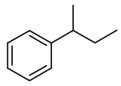
C3 Alkylbenzenes (C9)

1298.9-K-CY	n-Propylbenzene	120.20	[103-65-1]	1000µg/mL	cyclohexane	1	1mL
1274.9-K-CY	1,2,3-Trimethylbenzene	120.20	[526-73-8]	1000µg/mL	cyclohexane	1	1mL
1270.9-K-CY	1,2,4-Trimethylbenzene	120.20	[95-63-6]	1000µg/mL	cyclohexane	1	1mL
1269.9-K-IO	1,3,5-Trimethylbenzene Mesitylene	120.20	[108-67-8]	1000µg/mL	isooctane	1	1mL
1273.9-K-CY	1-Ethyl-3-methylbenzene	120.20	[620-14-4]	1000µg/mL	cyclohexane	1	1mL
1272.9-K-CY	1-Ethyl-4-methylbenzene	120.20	[622-96-8]	1000µg/mL	cyclohexane	1	1mL
2156.9-K-CY	2-Ethyl-1-methylbenzene	120.20	[611-14-3]	1000µg/mL	cyclohexane	1	1mL
2155.9-K-CY	Isopropylbenzene Cumene	120.20	[98-82-8]	1000µg/mL	cyclohexane	1	1mL
3535.8-KIT	C3 Alkylbenzene Kit						Kit

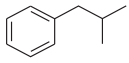
C4 Alkylbenzenes (C10)

0392.10-K-IO	n-Butylbenzene	134.22	[104-51-8]	1000µg/mL	isooctane	1	1mL
3602.10-K-IO	1,2,3,4-Tetramethylbenzene	134.22	[488-23-3]	1000µg/mL	isooctane	1	1mL
2200.10-K-IO	1,2,3,5-Tetramethylbenzene Indurene	134.22	[527-53-7]	1000µg/mL	isooctane	1	1mL
2158.10-K-IO	1,2,4,5-Tetramethylbenzene	134.22	[95-93-2]	1000µg/mL	isooctane	1	1mL
2337.10-K-HX	1,2-Dimethyl-3-ethylbenzene	134.22	[933-98-2]	1000µg/mL	hexane	1	1mL
2338.10-K-HX	1,2-Dimethyl-4-ethylbenzene	134.22	[934-80-5]	1000µg/mL	hexane	1	1mL

2330.10-K-HX	1,3-Dimethyl-2-ethylbenzene		134.22	[2870-04-4]	1000µg/mL	hexane	1	1mL
2339.10-K-HX	1,3-Dimethyl-5-ethylbenzene		134.22	[934-74-7]	1000µg/mL	hexane	1	1mL
2340.10-K-HX	1,4-Dimethyl-2-ethylbenzene		134.22	[1758-88-9]	1000µg/mL	hexane	1	1mL
2345.10-K-HX	1-Methyl-2-n-propylbenzene		134.22	[1074-17-5]	1000µg/mL	hexane	1	1mL
2346.10-K-HX	1-Methyl-3-n-propylbenzene		134.22	[1074-43-7]	1000µg/mL	hexane	1	1mL
2347.10-K-HX	1-Methyl-4-n-propylbenzene		134.22	[1074-55-1]	1000µg/mL	hexane	1	1mL
2172.10-K-HX	1,2-Diethylbenzene		134.22	[135-01-3]	1000µg/mL	hexane	1	1mL
2226.10-K-HX	1,3-Diethylbenzene		134.22	[141-93-5]	1000µg/mL	hexane	1	1mL
1502.10-K-IO	1,4-Diethylbenzene		134.22	[105-05-5]	1000µg/mL	isooctane	1	1mL
2329.10-K-HX	o-Isopropyltoluene	o-Cymene	134.22	[527-84-4]	1000µg/mL	hexane	1	1mL
2328.10-K-HX	m-Isopropyltoluene	m-Cymene	134.22	[535-77-3]	1000µg/mL	hexane	1	1mL
0924.10-500-IO	p-Isopropyltoluene	p-Cymene	134.22	[99-87-6]	500µg/mL	isooctane	1	1mL
2341.10-K-HX	sec-Butylbenzene		134.22	[135-98-8]	1000µg/mL	hexane	1	1mL



2343.10-K-HX	tert-Butylbenzene		134.22	[98-06-6]	1000µg/mL	hexane	1	1mL
2342.10-K-HX	Isobutylbenzene		134.22	[538-93-2]	1000µg/mL	hexane	1	1mL



3536.21-KIT	C4 Alkylbenzene Kit	Kit

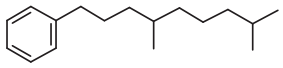
C5-C19 Alkylbenzenes (C11-C25)

2336.11-K-HX	n-Pentylbenzene	148.25	[538-68-1]	1000µg/mL	hexane	1	1mL
2159.11-K-T	Pentamethylbenzene	148.25	[700-12-9]	1000µg/mL	toluene	1	1mL
2331.11-K-HX	(2-Methylbutyl)benzene	148.25	[3968-85-2]	1000µg/mL	hexane	1	1mL
0393.12-K-IO	n-Hexylbenzene	162.28	[1077-16-3]	1000µg/mL	isooctane	1	1mL
2685.12-K-IO	Hexamethylbenzene	162.28	[87-85-4]	1000µg/mL	isooctane	1	1mL
2334.12-K-HX	1,2,4-Triethylbenzene	162.28	[877-44-1]	1000µg/mL	hexane	1	1mL
2335.12-K-HX	1,3,5-Triethylbenzene	162.28	[102-25-0]	1000µg/mL	hexane	1	1mL
2332.12-K-HX	5-tert-Butyl-m-xylene	162.28	[98-19-1]	1000µg/mL	hexane	1	1mL
2333.12-K-HX	1-tert-Butyl-4-ethylbenzene	162.28	[7364-19-4]	1000µg/mL	hexane	1	1mL
2704.12-100-ME	1-Ethyl-4-(2-methylpropyl)benzene	162.28	[100319-40-2]	100µg/mL	methanol	1	1mL
3508.13-K-IO	n-Heptylbenzene	176.30	[1078-71-3]	1000µg/mL	isooctane	1	1mL
0330.14-K-IO	n-Octylbenzene	190.33	[2189-60-8]	1000µg/mL	isooctane	1	1mL
1076.15-K-IO	n-Nonylbenzene	204.36	[1081-77-2]	1000µg/mL	isooctane	1	1mL
0989.15-K-IO	Dimethylheptylbenzene (Isomer mixture)	204.36		1000µg/mL	isooctane	1	1mL
	1-Heptyl-2,3-dimethylbenzene		[145057-44-9 /				
	1-Heptyl-2,4-dimethylbenzene		87119-26-4 /				
	1-Heptyl-3,5-dimethylbenzene		52033-95-1 /				
	2-Heptyl-1,3-dimethylbenzene		145057-45-0 /				
	2-Heptyl-1,4-dimethylbenzene		87119-27-5 /				
	4-Heptyl-1,2-dimethylbenzene		92724-73-7]				
0331.16-K-IO	n-Decylbenzene	218.39	[104-72-3]	1000µg/mL	isooctane	1	1mL
0988.16-K-IO	Methylnonylbenzene (Isomer mixture)	218.39		1000µg/mL	isooctane	1	1mL
	1-Methyl-2-nonylbenzene		[53657-85-5 /				
	1-Methyl-3-nonylbenzene		18849-95-1 /				
	1-Methyl-4-nonylbenzene		87630-23-7]				
1077.17-K-IO	n-Undecylbenzene	232.41	[6742-54-7]	1000µg/mL	isooctane	1	1mL
0332.18-K-IO	n-Dodecylbenzene	246.44	[123-01-3]	1000µg/mL	isooctane	1	1mL
2687.18-K-IO	Hexaethylbenzene	246.44	[604-88-6]	1000µg/mL	isooctane	1	1mL
1078.19-K-IO	n-Tridecylbenzene	260.47	[123-02-4]	1000µg/mL	isooctane	1	1mL
1079.20-K-IO	n-Tetradecylbenzene	274.49	[1459-10-5]	1000µg/mL	isooctane	1	1mL
1080.21-K-IO	n-Pentadecylbenzene	288.52	[2131-18-2]	1000µg/mL	isooctane	1	1mL
1081.22-K-IO	n-Hexadecylbenzene	302.55	[1459-09-2]	1000µg/mL	isooctane	1	1mL
3537.22-K-IO	1,4-Bis(2-ethylhexyl)benzene	302.54	[87117-22-4]	1000µg/mL	isooctane	1	1mL
1082.23-K-IO	n-Heptadecylbenzene	316.58	[14752-75-1]	1000µg/mL	isooctane	1	1mL
1083.24-K-IO	n-Octadecylbenzene	330.60	[4445-07-2]	1000µg/mL	isooctane	1	1mL
1084.25-K-IO	n-Nonadecylbenzene	344.63	[29136-19-4]	1000µg/mL	isooctane	1	1mL
3050.34-KIT	C5-C19 Alkylbenzenes Kit						Kit

Isoprenoid chain attached to cyclohexane or benzene

0826.17 **(4,8-Dimethylnonyl)benzene**

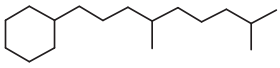
[205529-85-7] MW 232.41



0826.17-K-IO 1000µg/mL isooctane, 1x1mL

0827.17 **(4,8-Dimethylnonyl)cyclohexane**

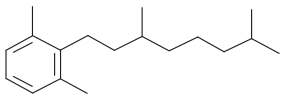
[205529-86-8] MW 238.46



0827.17-K-IO 1000µg/mL isooctane, 1x1mL

1069.18 **1,3-Dimethyl-2-(3,7-dimethyloctyl)benzene**

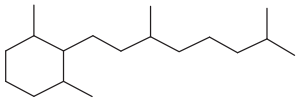
[19550-60-8] MW 246.44



1069.18-K-IO 1000µg/mL isooctane, 1x1mL

1070.18 **1,3-Dimethyl-2-(3,7-dimethyloctyl)cyclohexane**

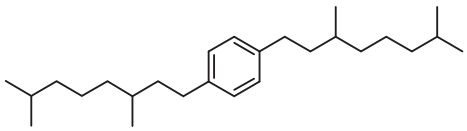
[19550-61-9] MW 252.49



1070.18-K-IO 1000µg/mL isooctane, 1x1mL

3538.26 **1,4-Bis(3,7-dimethyloctyl)benzene**

[211809-80-2] MW 358.64

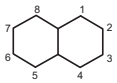


3538.26-K-IO 1000µg/mL isooctane, 1x1mL

0829.5 **Ring-Containing Isoprenoid Kit**

0829.5-KIT Kit

Bicyclic compounds



Hydronaphthalenes (dihydro, hexahydro)

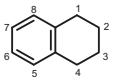
0708.10-K-IO	1,2-Dihydronaphthalene	130.19	[447-53-0]	1000µg/mL	isooctane	1	1mL
0717.10-K-IO	Hexahydronaphthalene	134.22	[41375-99-9]	1000µg/mL	isooctane	1	1mL
3051.2-KIT	Hydronaphthalene Kit						Kit

Decalines (decahydronaphthalenes)

0719.10-K-IO	cis-Decaline	138.25	[493-01-6]	1000µg/mL	isooctane	1	1mL
0719.10-10MG	cis-Decaline	138.25	[493-01-6]	neat		1	10mg
0718.10-K-IO	trans-Decaline	138.25	[493-02-7]	1000µg/mL	isooctane	1	1mL
0718.10-10MG	trans-Decaline	138.25	[493-02-7]	neat		1	10mg
1263.10-K-IO	Decaline (cis+trans)	138.25	[91-17-8]	1000µg/mL	isooctane	1	1mL
1393.11-500-IO	1-Methyldecaline	152.28	[2958-75-0]	500µg/mL	isooctane	1	1mL

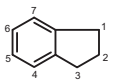
1395.13-500-IO	2-Isopropyldecaline	180.34	[861642-00-4]	500 µg/mL	isooctane	1	1mL
1394.15-500-IO	1,1,4,4,5-Pentamethyldecaline	208.39		500µg/mL	isooctane	1	1mL
3052.6-KIT	Decaline Kit						Kit
0077.8-KIT	Decaline/Dihydro-/Hexahydronaphthalene Kit						Kit

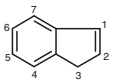
Tetralines (tetrahydronaphthalenes)



0741.10-K-IO	Tetraline	132.21	[119-64-2]	1000µg/mL	isooctane	1	1mL
2153.11-K-IO	1-Methyltetraline	146.23	[1559-81-5]	1000µg/mL	isooctane	1	1mL
0742.11-K-IO	5-Methyltetraline	146.23	[2809-64-5]	1000µg/mL	isooctane	1	1mL
0743.11-K-IO	6-Methyltetraline	146.23	[1680-51-9]	1000µg/mL	isooctane	1	1mL
0747.12-K-IO	1,4-Dimethyltetraline	160.26	[4175-54-6]	1000µg/mL	isooctane	1	1mL
0748.12-K-IO	1,8-Dimethyltetraline	160.26	[25419-33-4]	1000µg/mL	isooctane	1	1mL
0749.12-K-IO	2,6-Dimethyltetraline	160.26	[7524-63-2]	1000µg/mL	isooctane	1	1mL
0750.12-K-IO	2,7-Dimethyltetraline	160.26	[13065-07-1]	1000µg/mL	isooctane	1	1mL
0751.12-K-IO	5,7-Dimethyltetraline	160.26	[21693-54-9]	1000µg/mL	isooctane	1	1mL
0744.12-K-IO	2-Ethyltetraline	160.26	[32367-54-7]	1000µg/mL	isooctane	1	1mL
0745.12-K-IO	5-Ethyltetraline	160.26	[42775-75-7]	1000µg/mL	isooctane	1	1mL
0746.12-K-IO	6-Ethyltetraline	160.26	[22531-20-0]	1000µg/mL	isooctane	1	1mL
0753.13-K-IO	1,1,6-Trimethyltetraline	174.29	[475-03-6]	1000µg/mL	isooctane	1	1mL
0752.13-K-IO	1,5,8-Trimethyltetraline	174.29	[21693-51-6]	1000µg/mL	isooctane	1	1mL
0756.13-K-IO	2,5,8-Trimethyltetraline	174.29	[30316-17-7]	1000µg/mL	isooctane	1	1mL
0754.14-K-IO	2,2,5,7-Tetramethyltetraline	188.32	[23342-25-8]	1000µg/mL	isooctane	1	1mL
0755.18-K-IO	6,7-Diethyl-1,1,4,4-tetramethyltetraline	244.42	[55741-10-1]	1000µg/mL	isooctane	1	1mL
0076.17-KIT	Tetraline Kit,						Kit

Indanes and indenes





1612.9-100MG	Inden	116.16	[95-13-6]	neat		1	100mg
1613.9-100MG	Indan	118.18	[496-11-7]	neat		1	100mg
3462.10-K-IO	1-Methylindene	130.20	[767-59-9]	1000µg/mL	isooctane	1	1mL
1857.10-K-IO	5-Methylindan	132.21	[874-35-1]	1000µg/mL	isooctane	1	1mL
1858.12-K-IO	1,4,7-Trimethylindan	160.26	[54340-87-3]	1000µg/mL	isooctane	1	1mL
1859.13-K-IO	1,1,5,6-Tetramethylindan	174.29	[941-60-6]	1000µg/mL	isooctane	1	1mL
1860.14-K-IO	1,1,3,3,5-Pentamethylindan	188.32	[81-03-8]	1000µg/mL	isooctane	1	1mL
2325.18-K-IO	1-Phenyl-1,3,3-trimethylindan	236.36	[3910-35-8]	1000µg/mL	isooctane	1	1mL
1861.18-K-IO	1,1,3,5-Tetramethyl-3-neopentylindan	244.42	[29577-16-0]	1000µg/mL	isooctane	1	1mL
3053.9-KIT	Indan/Inden Kit						Kit

Aminoindanes

1776.9-10MG	1-Aminoindan	133.19	[34698-41-4]	neat		1	10mg
1777.9-10MG	2-Aminoindan	133.19	[2975-41-9]	neat		1	10mg
1778.9-10MG	5-Aminoindan	133.19	[24425-40-9]	neat		1	10mg
1910.3-KIT	Aminoindan Kit						Kit

Oxyindanes

1598.9-10MG	5-Hydroxy-1-indanone	148.16	[3470-49-3]	neat		1	10mg

Other bicyclic compounds

0069.7 **Norbornane**

[279-23-2] MW 96.17

0069.7-K-ME 1000µg/mL methanol, 1x1mL

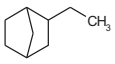
0068.8 **Bicyclo[3.3.0]octane**

[279-23-2] MW 110.20

0068.8-K-CY 1000µg/mL cyclohexane, 1x1mL

0072.9 **2-Ethylbicyclo[2.2.1]heptane**

[2146-41-0] MW 124.23



0072.9-K-CY 1000µg/mL cyclohexane, 1x1mL

0070.9 **cis-Bicyclo[4.3.0]nonane**

[4551-51-3] MW 124.23

0070.9-K-CY 1000µg/mL cyclohexane, 1x1mL

0071.9 **trans-Bicyclo[4.3.0]nonane**

[3296-50-2] MW 124.23

0071.9-K-CY 1000µg/mL cyclohexane, 1x1mL

1740.10 **5,6-Dihydrodicyclopentadiene**

3a,4,5,6,7,7a-Hexahydro-

4,7-methano-1H-indene

[4488-57-7] MW 134.22

1740.10-K-IO 1000µg/mL isooctane, 1x1mL

Tricyclic compounds

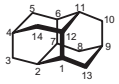
Deuterated adamantanes

1648.10-K-IO	Adamantane-d16	152.34	[30470-60-1]	1000µg/mL	isooctane	1	1mL
1648.10-K-IO	Adamantane-d16	152.34	[30470-60-1]	1000µg/mL	isooctane	5	1mL

Adamantanes

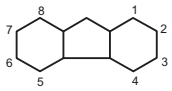
0800.10-K-IO	Adamantane	136.24	[281-23-2]	1000µg/mL	isooctane	1	1mL
0801.11-K-IO	1-Methyladamantane	150.27	[768-91-2]	1000µg/mL	isooctane	1	1mL
0803.11-K-IO	2-Methyladamantane	150.27	[700-56-1]	1000µg/mL	isooctane	1	1mL
0805.12-K-IO	1,3-Dimethyladamantane	164.29	[702-79-4]	1000µg/mL	isooctane	1	1mL
0802.12-K-IO	1-Ethyladamantane	164.29	[770-69-4]	1000µg/mL	isooctane	1	1mL
0804.12-K-IO	2-Ethyladamantane	164.29	[14451-87-7]	1000µg/mL	isooctane	1	1mL
0808.12-K-IO	1,2-/1,4-Dimethyladamantane	164.29	[16207-81-1 / [16267-35-9]	1000µg/mL	isooctane	1	1mL
0807.13-K-IO	1,3,5-Trimethyladamantane	178.32	[707-35-7]	1000µg/mL	isooctane	1	1mL
0806.13-K-IO	1-Ethyl-3-methyladamantane	178.32	[1687-34-9]	1000µg/mL	isooctane	1	1mL
0810.10-KIT	Adamantane Kit						Kit

Diamantanes



1085.14-K-IO	Diamantane	188.32	[2292-79-7]	1000μg/mL	Isooctane	1	1mL
1085.14-10MG	Diamantane	188.32	[2292-79-7]	neat		1	10mg
1311.15-K-IO	1-Methyldiamantane	202.34	[26460-76-4]	1000μg/mL	Isooctane	1	1mL
1312.16	1,6-Dimethyldiamantane	216.37	[865443-41-0]	Please inquire			
1368.2-KIT	Diamantane Kit, exclusive of 1312.16						Kit

Hydrofluorenes

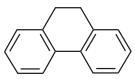


3539.11-K-IO	Perhydrofluorene	178.31	[5744-03-6]	1000μg/mL	Isooctane	1	1mL
3539.11-10MG	Perhydrofluorene	178.31	[5744-03-6]	neat		1	10mg

Hydrophenanthrenes and hydroanthracenes

0791.14 **9,10-Dihydrophenanthrene**

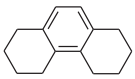
[776-35-2] MW 180.25



0791.14-K-IO 1000μg/mL isooctane, 1x1mL

0792.14 **1,2,3,4,5,6,7,8-Octahydrophenanthrene**

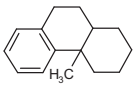
[5325-97-3] MW 186.30



0792.14-K-IO 1000μg/mL isooctane, 1x1mL

0793.15 **4α-Methyl-1,2,3,4,9,10-hexahydrophenanthrene (cis/trans)**

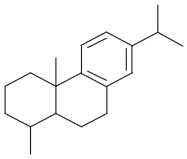
[60795-82-6] MW 200.33



0793.15-K-IO 1000μg/mL isooctane, 1x1mL

0795.19 **Dehydroabietine**

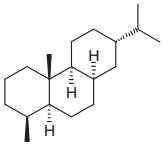
[5323-56-8] MW 256.44



0795.19-500-IO 500μg/mL isooctane, 1x1mL

0796.19 **Fichtelite**

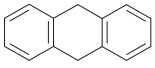
[2221-95-6] MW 262.48



0796.19-500-IO 500μg/mL isooctane, 1x1mL

3850.14 **9,10-Dihydroanthracene**

[613-31-0] MW 180.25



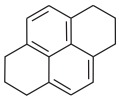
3850.14-K-1O 1000μg/mL, isooctane, 1x1 mL

0790.5 **Hydrophenanthrene/ Anthracene Kit**

0790.5-KIT Kit

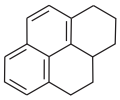
Polycyclic compounds (4-7 rings including hydroPAHs)

2601.16 **1,2,3,6,7,8-Hexahydropyrene**
[1732-13-4] MW 208.31



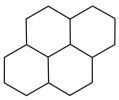
2601.16-200-T 200μg/mL toluene, 1x1mL
2601.16-10MG neat, 1x10mg

2602.16 **1,2,3,3a,4,5-Hexahydropyrene**
[5385-37-5] MW 208.31



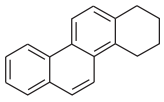
2602.16-200-T 200μg/mL toluene 1, 1mL
2602.16-10MG neat, 1x10mg

2603.16 **Hexadecahydropyrene**
Perhydropyrene
[2435-85-0] MW 218.39



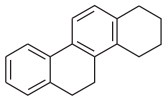
2603.16-200-T 200μg/mL toluene, 1x1mL
2603.16-10MG neat, 1x10mg

2604.18 **1,2,3,4-Tetrahydrochrysene**
[2091-90-9] MW 232.33



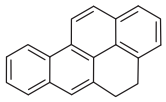
2604.18-10UG neat, 1x10μg

2605.18 **1,2,3,4,5,6-Hexahydrochrysene**
[2091-91-0] MW 234.34



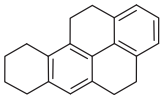
2605.18-200-T 200μg/mL toluene, 1x1mL

2606.20 **4,5-Dihydrobenzo[a]pyrene**
[57652-66-1] MW 254.33



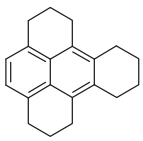
2606.20-200-T 200μg/mL toluene, 1x1mL

2607.20 **4,5,7,8,9,10,11,12-Octahydrobenzo[a]pyrene**
[73712-70-6] MW 260.38



2607.20-200-T 200μg/mL toluene, 1x1mL

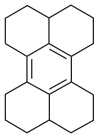
2608.20 **1,2,3,6,7,8,9,10,11,12-Decahydrobenz[e]pyrene**
[92387-50-3] MW 262.40



2608.20-200-T 200μg/mL toluene, 1x1mL
2608.20-5MG neat, 1x5mg

2609.20 **1,2,3,3a,4,5,6,7,8,9,9a,10,11,12-Tetradecahydroperylene**

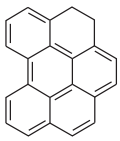
[7594-86-7] MW 266.43



2609.20-200-T	200μg/mL toluene 1, 1mL
2609.20-10MG	neat, 1x10mg

2610.22 **3,4-Dihydrobenzo[ghi]perylene**

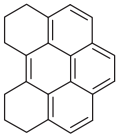
[16310-65-9] MW 278.36,



2610.22-10UG	neat, 1x10μg

2611.22 **5,6,7,8,9,10-Hexahydrobenz[ghi]perylene**

[35281-51-7] MW 282.39

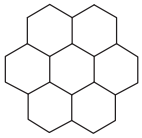


Please Inquire

2612.24 **Tetracosahydrocoronene**

Perhydrocoronene

[54171-94-7] MW 324.55

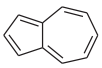


2612.24-200-T	200μg/mL toluene, 1x1mL
2612.24-10MG	neat, 1x10mg

Monoterpenoid (monoterpanes) hydrocarbon compounds

0923.10 **Azulene**

[275-51-4] MW 128.18



0923.10-500-IO 500μg/mL isooctane, 1x1mL

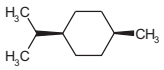
0338.10 **Isocamphane**

[38451-93-3] MW 138.25

0338.10-K-HX 1000μg/mL hexane, 1x1mL

0333.10 **cis-1-Isopropyl-4-methylcyclohexane**

[6069-98-3] MW 140.27



0333.10-K-HX 1000μg/mL hexane, 1x1mL

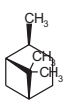
0334.10 **trans-1-Isopropyl-4-methylcyclohexane**

[1678-82-6] MW 140.27

0334.10-K-HX 1000μg/mL hexane, 1x1mL

0335.10 **(1R)-(+)-cis-Pinane**

[4795-86-2] MW 138.25



0335.10-K-HX 1000μg/mL hexane, 1x1mL

0336.10 **(1R)-(+)-trans-Pinane**

[4863-59-6] MW 138.25

0336.10-K-HX 1000μg/mL hexane, 1x1mL

0103.10 **(1S)-(-)-cis-Pinane**

[4755-33-3] MW 138.25

0103.10-K-HX 1000μg/mL hexane, 1x1mL

0337.10 **(1S)-(-)-trans-Pinane**

[10281-53-5] MW 138.25

0337.10-K-HX 1000μg/mL hexane, 1x1mL

0339.10 **Tricyclene**

[508-32-7] MW 136.24

0339.10-K-HX 1000μg/mL hexane, 1x1mL

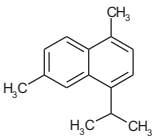
0111.9 **Monoterpan Kit**

0111.9-KIT Kit

Sesquiterpenoid compounds

0733.15 **Cadalene**

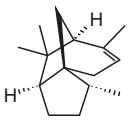
[483-78-3] MW 198.31



0733.15-500-IO 500μg/mL isooctane, 1x1mL

3662.15 **(-)-α-Cedrene**

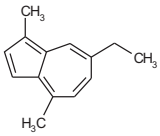
[469-61-4] MW 204.35



3662.15-500-IO 500μg/mL isooctane, 1x1mL

0340.14 **Chamazulene**

[529-05-5] MW 184.28

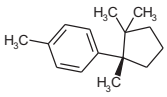


0340.14-K-IO 1000μg/mL isooctane, 1x1mL

0340.14-10MG neat, 1x10mg

0920.15 **(+)-Cuparene**

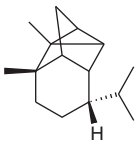
[16982-00-6] MW 202.34



0920.15-500-IO 500μg/mL isooctane, 1x1mL

3540.15 **(+)-Cyclosativene**

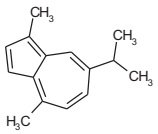
[22469-52-9] MW 204.35



3540.15-500-IO 500μg/mL isooctane, 1x1mL

0921.15 **Guaiazulene**

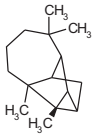
[489-84-9] MW 198.31



0921.15-500-IO 500μg/mL isooctane, 1x1mL

0922.15 **(+)-Longicyclene**

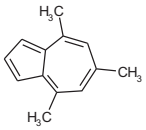
[1137-12-8] MW 204.36



0922.15-500-IO 500μg/mL isooctane, 1x1mL

0447.13 **4,6,8-Trimethylazulene**

[941-81-1] MW 170.26



0447.13-K-IO 1000μg/mL isooctane, 1x1mL

0930.8 **Sesquiterpenoid Kit**

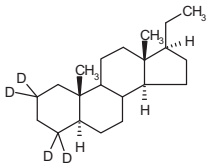
0930.8-KIT Kit

Steranes (Tetracyclic compounds)

Sterane internal standards

0979.21 **d4 Pregnane**

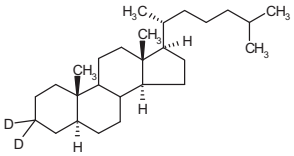
[205529-77-7] MW 292.55



0979.21-10-IO	10µg/mL isooctane, 1x1mL
0979.21-100-IO	100µg/mL isooctane, 1x1mL
0979.21-100-IO	100µg/mL isooctane, 5x1mL
0979.21-100-IO	100µg/mL isooctane, 10x1mL

0977.27 **d2 C27 ααα (20R)-Cholestane**

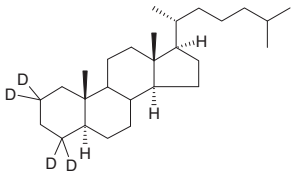
[122241-86-5] MW 374.70



0977.27-10-IO	10µg/mL isooctane, 1x1mL
0977.27-100-IO	100µg/mL isooctane, 1x1mL
0977.27-100-IO	100µg/mL isooctane, 5x1mL
0977.27-100-IO	100µg/mL isooctane, 10x1mL

0975.27 **d4 C27 ααα (20R)-Cholestane**

[205529-74-4] MW 376.71



0975.27-10-IO	10µg/mL isooctane, 10x1mL
0975.27-100-IO	100µg/mL isooctane, 1x1mL
0975.27-100-IO	100µg/mL isooctane, 5x1mL
0975.27-100-IO	100µg/mL isooctane, 10x1mL

0976.29 **d2 C29 ααα (20R)-Ethylcholestane**

MW 402.75

0976.29-10-IO	10µg/mL isooctane, 1x1mL
0976.29-100-IO	100µg/mL isooctane, 1x1mL
0976.29-100-IO	100µg/mL isooctane, 5x1mL
0976.29-100-IO	100µg/mL isooctane, 10x1mL

0974.29 **d4 C29 ααα (20R)-Ethylcholestane**

MW 404.76

	10µg/mL isooctane, 1x1mL
0974.29-100-IO	100µg/mL isooctane, 1x1mL
0974.29-100-IO	100µg/mL isooctane, 5x1mL
0974.29-100-IO	100µg/mL isooctane, 10x1mL

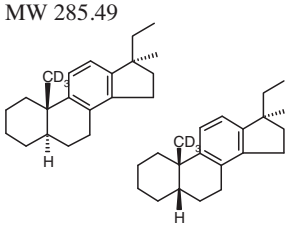
0980.28 **d4 C28 (20R)/C29 ααα (20R)-Methyl/Ethylcholestane**

MW 390.74 / 404.76

0980.28-10-IO	10µg/mL isooctane, 1x1mL
0980.28-100-IO	100µg/mL isooctane, 1x1mL

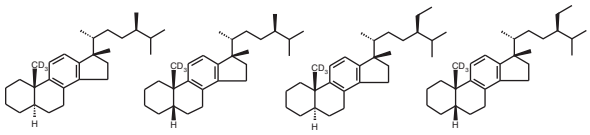
0983.21 **d3 C21 Monoaromatic Sterane (5α(H)/5β(H))**

MW 285.49



0983.21-10-IO	10µg/mL isooctane, 1x1mL

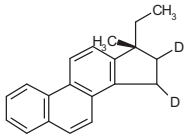
0986.28 **d3 C28/C29 Monoaromatic Sterane (5α(H)/5β(H))**



0986.28-10-IO	10µg/mL isooctane, 1x1mL

0984.20 **d2 C20 Triaromatic Sterane**

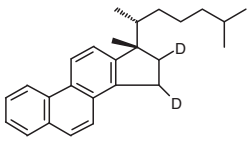
[205529-79-9] MW 262.39



0984.20-10-IO	10µg/mL isooctane, 1x1mL
0984.20-100-IO	100µg/mL isooctane, 1x1mL
0984.20-100-IO	100µg/mL isooctane, 5x1mL
0984.20-100-IO	100µg/mL isooctane, 10x1mL

1230.26 **d2 C26 Triaromatic Sterane**

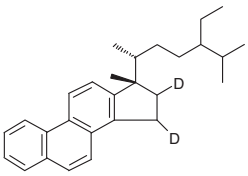
MW 346.56



1230.26-10-IO	10µg/mL isooctane, 1x1mL
1230.26-100-IO	100µg/mL isooctane, 1x1mL
1230.26-100-IO	100µg/mL isooctane, 5x1mL
1230.26-100-IO	100µg/mL isooctane, 10x1mL

0985.28 **d2 C28 Triaromatic Sterane**

[205529-81-3] MW 374.61



0985.28-10-IO	10µg/mL isooctane, 1x1mL
0985.28-100-IO	100µg/mL isooctane, 1x1mL
0985.28-100-IO	100µg/mL isooctane, 5x1mL
0985.28-100-IO	100µg/mL isooctane, 10x1mL

0981.28 **d2 C27/C28 Triaromatic Sterane**

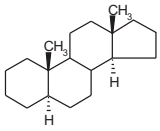
[-/205529-81-3]

0981.28-10-IO	10µg/mL isooctane, 1x1mL
0981.28-100-IO	100µg/mL isooctane, 1x1mL

Short-chained steranes

0674.19 **5α(H)-Androstane**

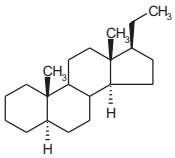
[438-22-2] MW 260.47



0674.19-100-IO 100µg/mL isooctane, 1x1mL

0675.21 **5α(H)-Pregnane**

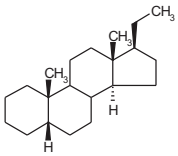
[641-85-0] MW 288.52



0675.21-100-IO 100µg/mL isooctane, 1x1mL

0676.21 **5β(H)-Pregnane**

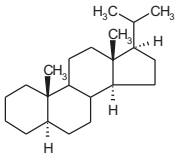
[481-26-5] MW 288.52



0676.21-100-IO 100µg/mL isooctane, 1x1mL

0848.22 **20-Methyl-5α(H)-pregnane**

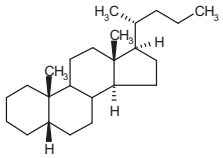
[5737-19-9] MW 302.55



0848.22-100-IO 100µg/mL isooctane, 1x1mL

0641.24 **5β(H)-Cholane**

[80373-86-0] MW 330.60

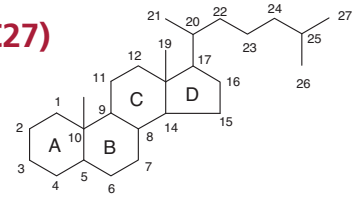


0641.24-100-IO 100µg/mL isooctane, 1x1mL

0078.5 **Short-chained Sterane Kit**

0078.5-KIT Kit

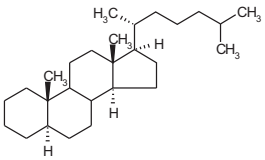
Cholestane series (C27)



0622.27 **ααα (20R)-Cholestane**

Cholestane

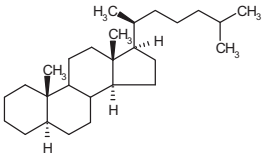
[481-21-0] MW 372.68



0622.27-100-IO 100µg/mL isooctane, 1x1mL

0603.27 **ααα (20S)-Cholestane**

[41083-75-4] 372.68

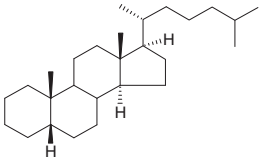


0603.27-100-IO 100µg/mL isooctane, 1x1mL

0601.27 **βαα (20R)-Cholestane**

Coprostane

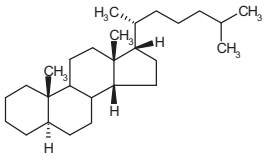
[481-20-9] MW 372.68



0601.27-100-IO 100µg/mL isooctane, 1x1mL

0602.27 **αββ (20R)-Cholestane**

[69483-47-2] MW 372.68



0602.27-100-IO 100µg/mL isooctane, 1x1mL

1194.4 **Cholestane Isomer Kit**

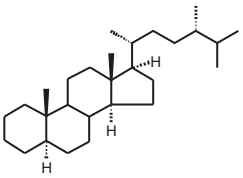
1194.4-KIT Kit

Compounds

Methylcholestanes series (C28)

3054.28 **ααα (20R,24R)-24-Methylcholestane**

[50897-35-3] MW 386.71

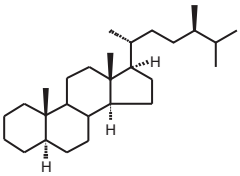


3054.28-100-IO 100µg/mL isooctane, 1x1mL

3055.28 **ααα (20R,24S)-24-Methylcholestane**

Ergostane

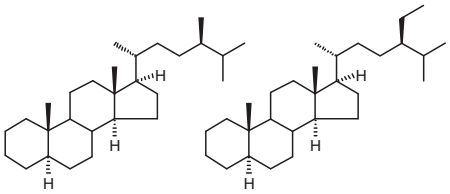
[511-20-6] MW 386.71



3055.28-50-IO 50µg/mL isooctane, 1 x1mL

0607.28 **ααα (20R,24R)-24-Methylcholestane and ααα (20R,24R)-24-Ethylcholestane**

[67069-21-0/-] MW 386.71

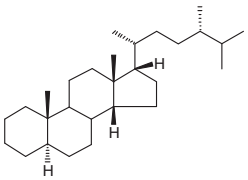


Contains: 32% C28, 68% C29

0607.28-100-IO 100µg/mL isooctane, 1x1mL

0643.28 **αββ (20R,24S)-24-Methylcholestane**

[71117-90-3] MW 386.71

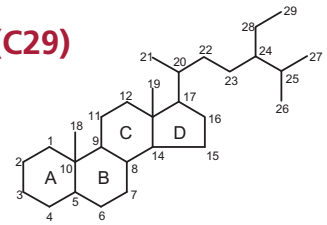


0643.28-100-IO 100µg/mL isooctane, 1x1mL

0670.5 **24-Methylcholestane Isomer Kit**

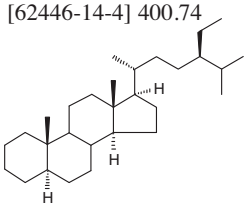
0670.4-KIT Kit

Ethylcholestanes series (C29)



0609.29 **ααα (20R,24R)-24-Ethylcholestane**

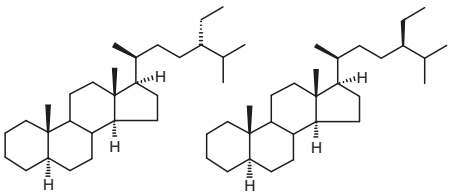
Stigmastane
[62446-14-4] 400.74



0609.29-100-IO 100µg/mL isooctane, 1x1mL

0663.29 **ααα (20S,24RS)-24-Ethylcholestane, 95%**

[78392-20-8] MW 400.74

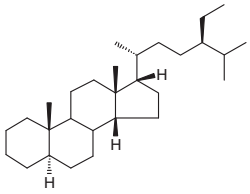


Contains: 48% 24S, 47% 24R

0663.29-100-IO 100µg/mL isooctane, 1x1mL

0662.29 **αββ (20R,24R)-24-Ethylcholestane**

[71117-92-5] MW 400.74

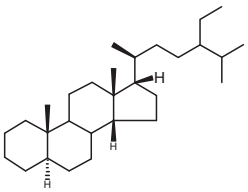


0662.29-100-IO 100µg/mL isooctane, 1x1mL

0913.29 **αββ (20S,24RS)-24-Ethylcholestane**

NEW

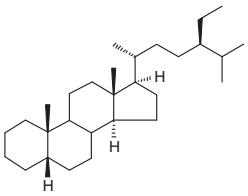
MW 400.74



0913.29-100-IO 100µg/mL isooctane, 1x1mL

0610.29 **βαα (20R,24R)-24-Ethylcholestane**

[4705-29-7] MW 400.74



0610.29-100-IO 100µg/mL isooctane, 1x1mL

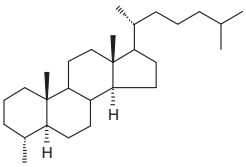
0680.7 **24-Ethylcholestane Isomer Kit**

0680.7-KIT Kit

4-Methylsteranes

0664.28 **ααα 4α/β-Methylcholestane, 90%**

[474-41-9] MW 400.74

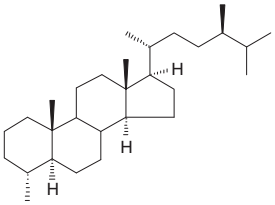


Contains: 91% 4α, 8% 4β

0664.28-100-IO 100µg/mL isooctane, 1x1mL

0665.30 **ααα (24R)-4α-Methyl-24-ethylcholestane, 93%**

[53596-90-0] MW 414.76



0665.30-100-IO 100µg/mL isooctane, 1x1mL

0079.3 **4α-Methyl Sterane Kit**

0079.3-KIT Kit

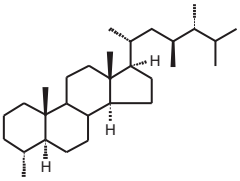
Dinosteranes (4,23,24-Trimethylcholestane)

NEW

3056.30 **ααα (20R,23R,24R)-4α,23,24-Trimethylcholestane**

(20R, 23R, 24R)-Dinosterane

[146276-37-1] MW 414.76

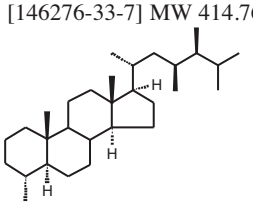


3056.30-5UG neat, 1x5µg

3057.30 **ααα (20R,23R,24S)-4α,23,24-Trimethylcholestane**

(20R, 23R, 24S)-Dinosterane

[146276-33-7] MW 414.76



3057.30-5UG neat, 1x5µg

3060.2 **Dinosterane Kit**

Dinosterane Kit

3060.2-KIT Kit

C27 Sterenes

0841.27-100-IO	Cholest-2-ene	370.67	[15910-23-3]	100µg/mL	isooctane	1	1mL
0842.27-100-IO	Cholest-3-ene	370.67	[16732-84-6]	100µg/mL	isooctane	1	1mL
0843.27-100-IO	Cholest-4-ene	370.67	[16732-86-8]	100µg/mL	isooctane	1	1mL
0604.27-100-IO	Cholest-5-ene	370.67	[570-74-1]	100µg/mL	isooctane	1	1mL
0605.27-100-IO	Cholest-8(14)-ene	370.67	[54725-42-7]	100µg/mL	isooctane	1	1mL
0678.27-100-IO	Cholest-3,5-diene	368.65	[747-90-0]	100µg/mL	isooctane	1	1mL
0677.27-100-IO	3, 5-Cyclocholestane	370.67	[17132-01-3]	100µg/mL	isooctane	1	1mL
0679.7-KIT	C27 Sterene Kit						Kit

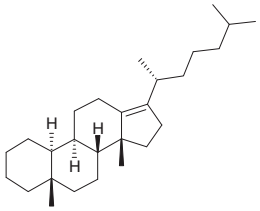
C28-C29 Sterenes

0606.28-100-IO	(24S)-24-Methylcholest-8(14)-ene	384.69	[6673-69-4]	100µg/mL	isooctane	1	1mL
0681.28-200-IO	(24R)-24-Methyl-3,5-cyclocholestane and (24R)-24-Ethyl-3,5-cyclocholestane, 5% C28, 61% C29	384.69	[36545-67-2 / 38776-72-6]	200µg/mL	isooctane	1	1mL
0847.29-100-IO	(24R)-24-Methylcholest-4-ene and (24R)-24-Ethylcholest-4-ene, 7% C28, 83% C29	384.69	[79897-60-2 / 71609-17-1]	100µg/mL	isooctane	1	1mL
0101.28-200-IO	(24R)-24-Methylcholest-5-ene and (24R)-24-Ethylcholest-5-ene	384.69	[76866-89-2 / 76866-91-6]	200µg/mL	isooctane	1	1mL
0683.29-100-IO	(24S)-24-Ethylcholest-5,22-diene	396.71	[76879-05-5]	100µg/mL	isooctane	1	1mL
0845.29-100-IO	(24R)-24-Ethylcholest-2-ene, 86%	398.72	[69088-87-5]	100µg/mL	isooctane	1	1mL
0684.29-100-IO	(24R)-24-Ethylcholest-8(14)-ene	398.72	[108881-85-2]	100µg/mL	isooctane	1	1mL
0686.29-100-IO	(24S)-24-Ethylcholesta-3,5,22-triene	394.69	[102491-96-3]	100µg/mL	isooctane	1	1mL
0685.29-100-IO	(24S)-24-Ethyl-3,5-cyclocholest-22-ene	396.71		100µg/mL	isooctane	1	1mL
0682.28-200-IO	(24R)-24-Methylcholesta-3,5-diene and (24R)-24-Ethylcholesta-3,5-diene, 69% C28, 13% C29	382.00	[102491-95-2 / 4970-37-0]	200µg/mL	isooctane	1	1mL
0846.29-100-IO	ααα (24R)-24-Methylcholest-3-ene and ααα (24R)-24-Ethylcholest-3-ene, 4% C28,, 41% C29	398.72	[211423-39-9 / 376372-00-8]	100µg/mL	isooctane	1	1mL
0687.16-KIT	C28/C29 Sterene Kit						Kit

Diasterenes

0864.27 **(20R)-13(17)-Diacholestene**

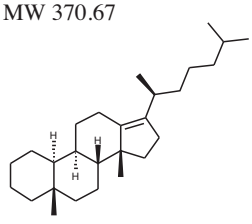
[82079-08-1] MW 370.67



0864.27-100-IO 100µg/mL isooctane, 1x1mL

0863.27 **(20S)-13(17)-Diacholestene**

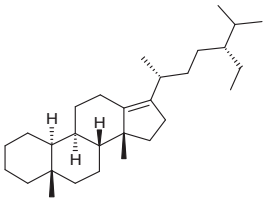
MW 370.67



0863.27-100-IO 100µg/mL isooctane, 1x1mL

0865.29 **(20R,24R)-24-Ethyldiacholest-13(17)-ene**

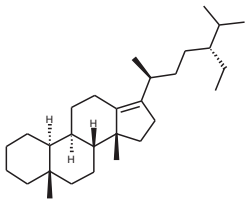
[99265-25-5] MW 398.72



0865.29-100-IO 100µg/mL isooctane, 1x1mL

0866.29 **(20S,24R)-24-Ethyldiacholest-13(17)-ene**

[57819-19-9] MW 398.72



0866.29-100-IO 100µg/mL isooctane, 1x1mL

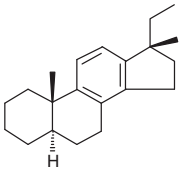
0890.4 **Diasterene Kit**

0890.4-KIT Kit

Ring-C monoaromatic steranes

0861.21 **C21 Ring-C Monoaromatic sterane (5α(H),10β(CH3)/5β(H),10β(CH3))**

[98774-59-5 / 98774-61-9] MW 282.47

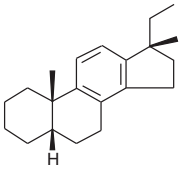


Contains: 51% 5α, 24% 5β

0861.21-100-IO 100µg/mL isooctane, 1x1mL

0862.21 **C21 Ring-C Monoaromatic sterane (5β(H),10β(CH3)/5α(H),10β(CH3))**

[98774-61-9 / 98774-59-5] MW 282.47

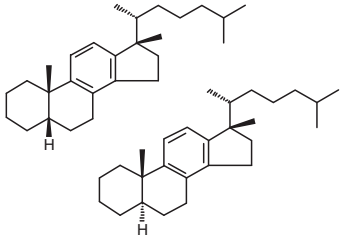


Contains: 15% 5α, 59% 5β

0862.21-100-IO 100µg/mL isooctane, 1x1mL

0858.27 **C27 Ring-C Monoaromatic sterane (5β(H),10β(CH3)/5α(H),10β(CH3))**

[98819-92-2 / 98819-91-1] MW 733.27

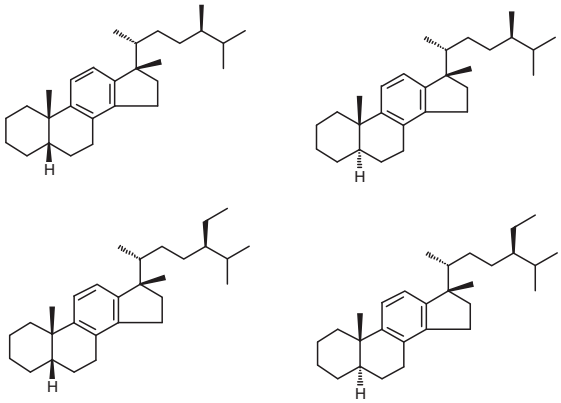


Contains: 23% 5α, 46% 5β

0858.27-100-IO 100µg/mL isooctane, 1x1mL

0859.28 **C28/C29 Ring-C Monoaromatic sterane (C28 5β(H),10β(CH3)/5α(H), 10β(CH3))(C29 5β(H), 10β(CH3)/5α(H)10β(CH3))**

[102045-91-0 / 102045-92-1 / 81943-49-9 / 81943-51-3]



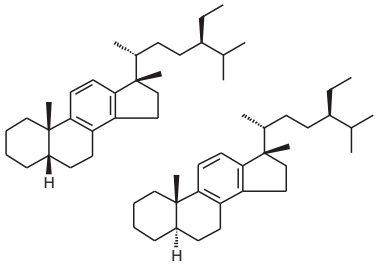
Contains: 12% C28 5α, 30% C28 5β

13% C29 5α, 33% C29 5β

0859.28-100-IO 100µg/mL isooctane, 1x1mL

0860.29 **C29 Ring-C Monoaromatic sterane (5β(H),10β(CH3)/5α(H),10β(CH3))**

[205176-21-2 / 81943-51-3] MW 394.69



Contains: 22% 5α, 53% 5β

0860.29-100-IO 100µg/mL isooctane, 1x1mL

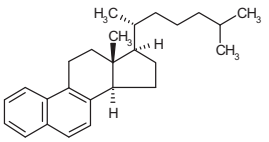
0910.8 **Ring-C Monoaromatic Sterane Kit**

0910.8-KIT Kit

Diaromatic steranes

0671.26 **C26 Diaromatic sterane, 91%**

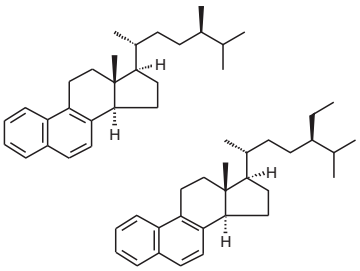
[103908-63-0] MW 348.58



0671.26-100-IO 100μg/mL isooctane, 1x1mL

0672.27 **C27/C28 Diaromatic steranes**

[110100-53-3 / 369364-82-9]



Contains: 8% C27, 88% C28

0672.27-200-IO 200μg/mL isooctane, 1x1mL

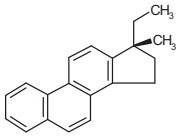
0673.3 **Diaromatic Sterane Kit**

0673.3-KIT Kit

Triaromatic steranes

0857.20 **C20 Triaromatic sterane**

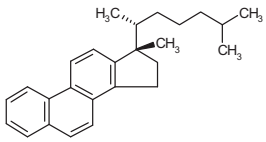
[81943-50-2] MW 260.38



0857.20-100-IO 100µg/mL isooctane, 1x1mL

0854.26 **C26 Triaromatic sterane**

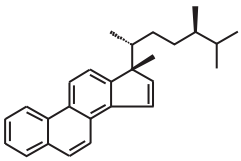
[80382-29-2]MW 344.54



0854.26-100-IO 100µg/mL isooctane, 1x1mL

3358.27 **C27 Triaromatic ster-14(15)-ene**

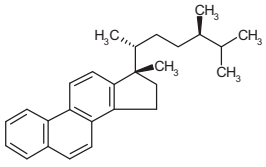
MW 356.54



3358.27-100-IO 100µg/mL isooctane, 1x1mL

0855.27 **C27/C28 Triaromatic steranes**

[80382-32-7] / [80382-33-8]

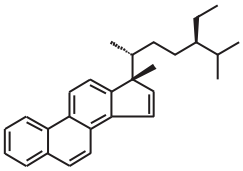


Contains: 42% C27, 53% C28

0855.27-200-IO 200µg/mL isooctane, 1x1mL

3359.27 **C28 Triaromatic ster-14(15)-ene**

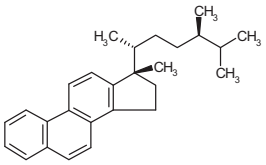
MW 370.58



3359.27-100-IO 100µg/mL isooctane, 1x1mL

0856.28 **C28 Triaromatic sterane**

[80382-33-8] MW 372.60



0856.28-100-IO 100µg/mL isooctane, 1x1mL

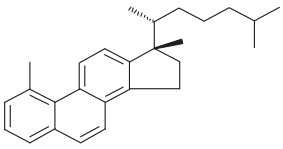
0960.7 **Triaromatic Sterane Kit**

0960.7-KIT Kit

1-Methyl triaromatic sterane

0667.27 **C27 1-Methyl triaromatic sterane**

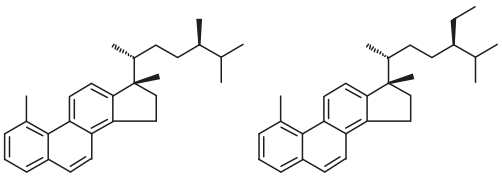
[80382-27-0] MW 358.57



0667.27-100-IO 100µg/mL isooctane, 1x1mL

0668.28 **C28/C29 1-Methyl triaromatic steranes**

[80382-31-6 / 80382-28-1]



Contains: 8% C28, 74% C29

0668.28-100-IO 100µg/mL isooctane, 1x1mL

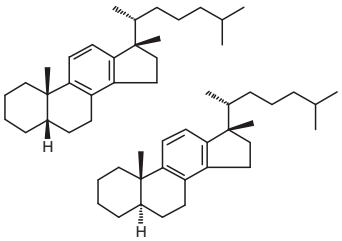
0669.3 **1-Methyl Triaromatic Sterane Kit**

0669.3-KIT Kit

Sterane precursors

0853.30 **Cycloartane**

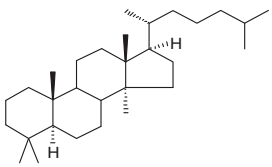
[511-64-8] MW 412.75



0853.30-100-IO 100µg/mL isooctane, 1x1mL

0623.30 **Lanostane**

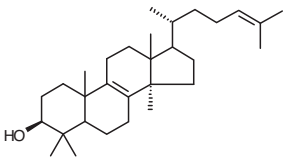
[474-20-4] MW 414.76



0623.30-100-IO 100µg/mL isooctane, 1x1mL

1279.30 **Lanosterol**

[79-63-0] MW 426.73



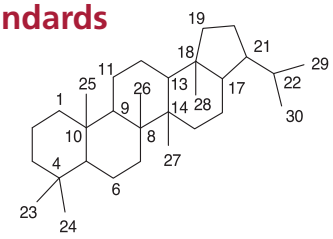
1279.30-100-AN 100µg/mL acetonitrile, 1x1mL

0075.3 **Sterol Precursor Kit**

0075.3-KIT Kit

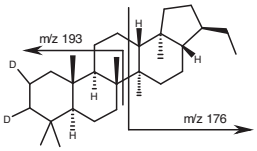
Triterpanes/hopanes (Pentacyclic compounds)

Hopane internal standards



0987.29 **d2 Isoadiantane**

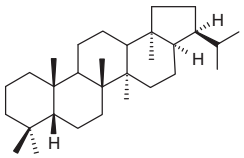
MW 400.73



0987.29-10-IO 10µg/mL isooctane, 1x1mL

2888.30 **17α(H),21α(H)-Hopane**

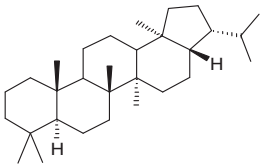
[33281-23-1] MW 412.75



2888.30-50-IO 50µg/mL isooctane, 1x1mL

0613.30 **17β(H),21β(H)-Hopane**

[471-62-5] MW 412.75

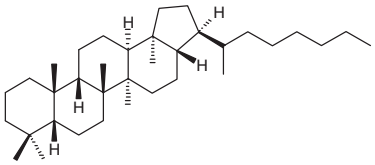


0613.30-100-IO 100µg/mL isooctane, 1x1mL

2629.35 **17β(H),21α(H)-(22RS)-Pentakishomohopane**

35βα 22RS

MW 482.88



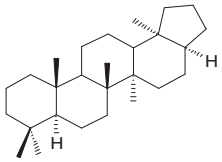
2629.35-50-IO 50µg/mL isooctane, 1x1 mL

C27 Hopanes (trisnorhopanes)

0615.27 **17α(H)-22,29,30-Trisnorhopane**

Tm

[53584-59-1] MW 370.67



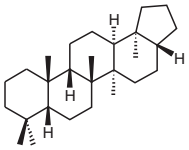
0615.27-100-IO 100µg/mL isooctane, 1x1mL

2639.27 **17β(H)-22,29,30-Trisnorhopane**

NEW

βTm

[51271-94-4] MW 370.67



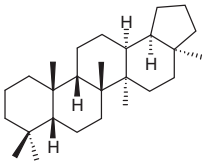
2639.27-5UG neat, 1x5µg

2635.27 **18α(H)-22,29,30-Trisnorneohopane**

NEW

Ts (27Ts)

[55199-72-9] MW 370.67



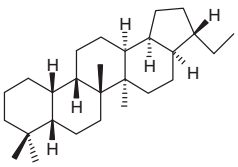
2635.27-5UG neat, 1x5µg

2634.27 **17α(H),21β(H)-25,28,30-Trisnorhopane**

NEW

25nor28aβ

[85115-38-4] MW 370.67



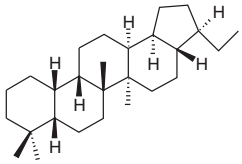
2634.27-5UG neat, 1x5µg

2632.27 **17β(H),21α(H)-25,28,30-Trisnorhopane**

NEW

25nor28βα

[75503-03-6] MW 370.67



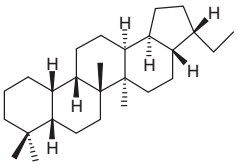
2632.27-5UG neat, 1x5µg

2633.27 **17β(H),21β(H)-25,28,30-Trisnorhopane**

NEW

25nor28ββ

[92692-42-7] MW 370.67



2633.27-5UG neat, 1x5µg

3061.6 **Trisnorhopanes Kit**

3061.6-KIT Kit

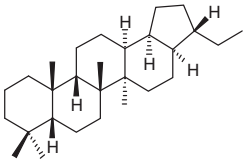
Compounds

C28 Hopanes (bisnorhopanes)

2637.28 **17α(H),21β(H)-28,30-Bisnorhopane**

NEW

28αβ
[83329-66-2] MW 384.69

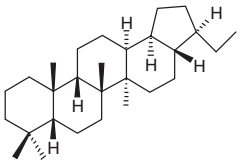


2637.28-5UG neat, 1x5μg

2636.28 **17β(H),21α(H)-28,30-Bisnorhopane**

NEW

28βα
[83377-28-0] MW 384.69



2636.28-5UG neat, 1x5μg

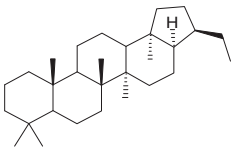
3062.2 **Bisnorhopane Kit**

3062.2-KIT Kit

C29 Hopanes (norhopanes)

1367.29 **17α(H),21α(H)-30-Norhopane**

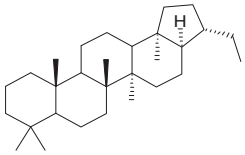
29ααα
[81600-07-9] MW 398.72



1367.29-50-IO 50µg/mL isooctane, 1x1mL

1321.29 **17α(H),21β(H)-30-Norhopane**

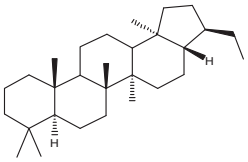
29αβ
[53584-60-4] MW 398.72



1321.29-50-IO 50µg/mL isooctane, 1x1mL

0614.29 **17β(H),21α(H)-30-Norhopane**

29βα
[3258-87-5] MW 398.72

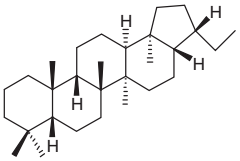


0614.29-100-IO 100µg/mL isooctane, 1x1mL

2640.29 **17β(H),21β(H)-30-Norhopane**

NEW

29ββ
[36728-72-0] MW 398.72

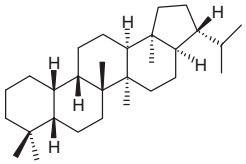


2640.29-5UG neat, 1x5µg

2638.29 **17α(H),21β(H)-25-Bisnorhopane**

NEW

25Nor
[84276-47-1] MW 398.72

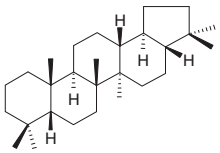


2638.29-5UG neat, 1x5µg

2883.29 **17β(H),18α(H)-28-Norspergulane**

NEW

29Nsp
MW 398.72



2883.29-5UG neat, 1x5µg

3063.6 **Norhopanes Kit**

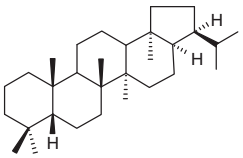
3063.6-KIT Kit

C30 Hopanes

2888.30 **17α(H),21α(H)-Hopane**

NEW

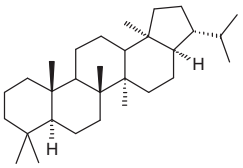
30αα
[33281-23-1] MW 412.75



2888.30-50-IO 50µg/mL isooctane, 1x1mL

0132.30 **17α(H),21β(H)-Hopane**

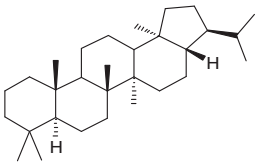
30αβ
[13849-96-2] MW 412.75



0132.30-100-IO 100µg/mL isooctane, 1x1mL

0612.30 **17β(H),21α(H)-Hopane**

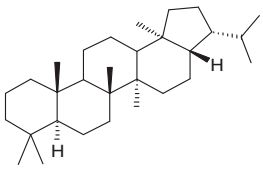
30βα
[1176-44-9] MW 412.75



0612.30-100-IO 100µg/mL isooctane, 1x1mL

0613.30 **17β(H),21β(H)-Hopane**

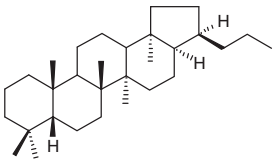
30ββ
[471-62-5] MW 412.75



0613.30-100-IO 100µg/mL isooctane, 1x1mL

2179.30 **17α(H),21α(H)-30-Nor-29-methylhopane**

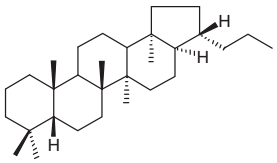
MW 412.75



2179.30-50-IO 50µg/mL isooctane, 1x1mL

2262.30 **17α(H),21β(H)-30-Nor-29-methylhopane**

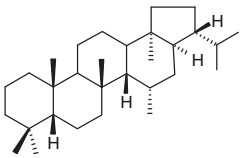
MW 412.75



2262.30-50-IO 50µg/mL isooctane, 1x1mL

2886.30 **17α(H)-30-Diahopane**

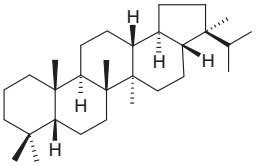
30D
MW 412.75



2886.30-5UG neat, 1x5µg

2884.30 **17β(H),21α(H)-22-Methyl-28-nor-spergulane**

30 Nsp
MW 412.75



2884.30-5UG neat, 1x5µg

3064.8 **C30 Hopane Kit**

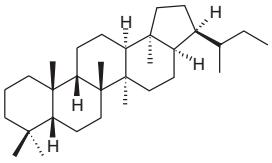
3064.8-KIT Kit

C31 Hopanes (homohopanes)

2617.31 **17α(H),21α(H)-(22RS)-Homohopane**

NEW

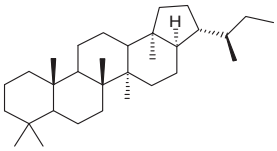
31αα 22RS
MW 426.78



2617.31-10UG neat, 1x10μg

1339.31 **17α(H),21β(H)-(22R)-Homohopane**

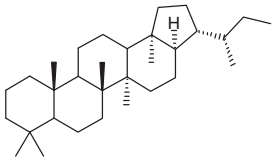
31αβ 22R
[60305-22-8] MW 426.78



1339.31-50-IO 50μg/mL isooctane, 1x1mL

1338.31 **17α(H),21β(H)-(22S)-Homohopane**

31αβ 22S
[60305-23-9] MW 426.78

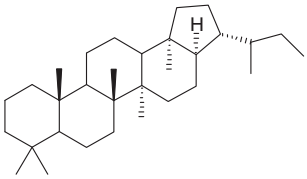


1338.31-50-IO 50μg/mL isooctane, 1x1mL

2255.31 **17α(H),21β(H)-(22RS)-Homohopane**

NEW

31αβ 22RS
[60305-22-8/60305-23-9] MW 426.78



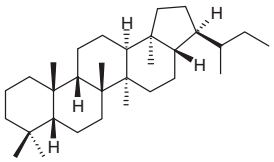
2255.31-10UG neat, 1x10μg

255.31-50-IO 50μg/mL isooctane, 1x1mL

2616.31 **17β(H),21α(H)-(22RS)-Homohopane**

NEW

31βα 22RS
[54352-49-7] MW 426.78

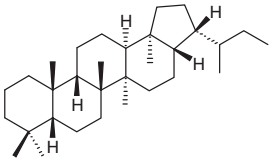


2616.31-10UG neat, 1x10μg

2618.31 **17β(H),21β(H)-(22RS)-Homohopane**

NEW

31ββ 22RS
[53584-62-6] MW 426.78



2618.31-10UG neat, 1x10μg

3065.8 **Homohopane Kit**

3065.8-KIT Kit

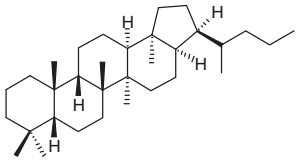
Compounds

C32 Hopanes (bishomohopanes)

NEW

2620.32 **17α(H),21α(H)-(22RS)-Bishomohopane**

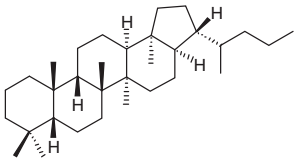
32ααα 22RS
[105498-25-7] MW 440.80



2620.32-10UG neat, 1x10μg

2619.32 **17α(H),21β(H)-(22RS)-Bishomohopane**

32αβ 22RS
[54352-50-0] MW 440.80

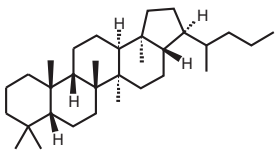


2619.32-10UG neat, 1x10μg

2619.32-50-IO 50μg/mL isooctane, 1x1mL

3603.32 **17β(H),21α(H)-(22RS)-Bishomohopane**

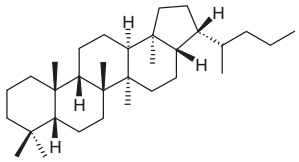
32βα 22RS
MW 440.80



3603.32-5UG neat, 1x5μg

2621.32 **17β(H),21β(H)-(22RS)-Bishomohopane**

32βββ 22RS
[54311-28-5] MW 440.80



2621.32-10UG neat, 1x10μg

2350.32 **Bishomohopane, Isomer mix**

MW 440.80

2350.32-100-IO 100μg/mL isooctane, 1x1mL

3066.9 **Bishopane Kit**

Including 2350.32

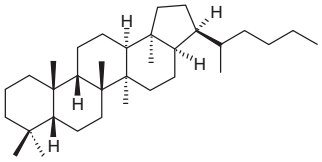
3066.9-KIT Kit

C33 Hopanes (trishomohopanes)

NEW

2623.33 **17α(H),21α(H)-(22RS)-Trishomohopane**

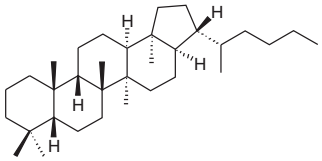
33ααα 22RS
[105498-26-8] MW 454.83



2623.33-10UG neat, 1x10μg

2622.33 **17α(H),21β(H)-(22RS)-Trishomohopane**

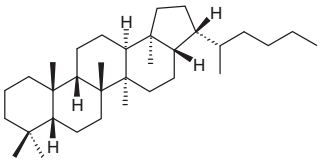
32αβ 22RS
[54340-13-5] [54320-13-5] MW 454.83



2622.33-50-IO 50μg/mL isooctane, 1x1mL
2622.33-10UG neat, 1x10μg

2624.33 **17β(H),21β(H)-(22RS)-Trishomohopane**

33βββ 22RS
[71629-80-6] MW 454.83



2624.33-10UG neat 1x10μg

3067.6 **Trishomohopane Kit**

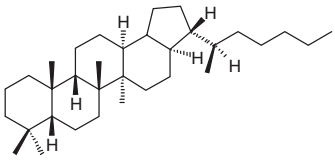
3067.6-KIT Kit

C34 Hopanes (tetrakishomohopanes)

NEW

2689.34 **17α(H),21β(H)-(22R)-Tetrakishomohopane**

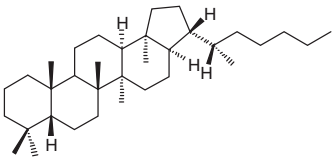
34αβ 22R
[67069-14-1] MW 468.86



2689.34-10UG neat, 1x10μg

2688.34 **17α(H),21β(H)-(22S)-Tetrakishomohopane**

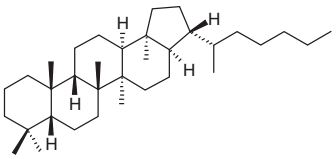
34αβ 22S
[67069-13-0] MW 468.86



2688.34-10UG neat, 1x10μg

2625.34 **17α(H),21β(H)-(22RS)-Tetrakishomohopane**

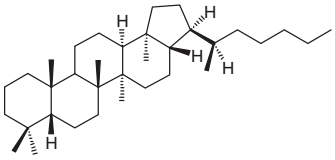
34αβ 22RS
[67069-13-0] MW 468.86



2625.34-10UG neat, 1x10μg

2691.34 **17β(H),21α(H)-(22R)-Tetrakishomohopane**

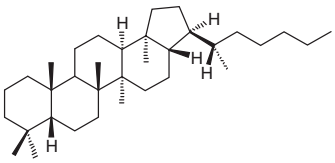
34βα 22R
[79951-54-5] MW 468.86



2691.34-10UG neat, 1x10μg

2690.34 **17β(H),21α(H)-(22S)-Tetrakishomohopane**

34βα 22S
[79897-70-4] MW 468.86



2690.34-5UG neat, 1x5μg

3068.4 **Tetrakishomohopane Kit**

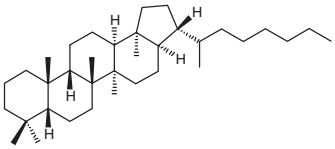
3068.4-KIT Kit

C35 Hopanes (pentakishomohopanes)

NEW

2628.35 **17α(H),21β(H)-(22RS)-Pentakishomohopane**

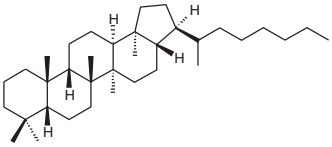
35aβ 22RS
[54370-82-0] MW 482.88



2628.35-10UG neat, 1x10µg

2629.35 **17β(H),21α(H)-(22RS)-Pentakishomohopane**

35βα 22RS
MW 482.88



2629.35-10UG neat, 1x10µg

3069.4 **Pentakishomohopane Kit**

3069.4-KIT Kit

Nor- and homohopane kit

0688.56 **Hopane Kit**

(All nor- and homohopane Kits above)

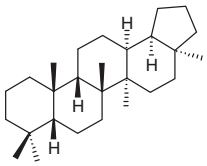
0688.56-KIT Kit

Rearranged hopanes

NEW

2635.27 **18α(H)-22,29,30-Trisnorneohopane**

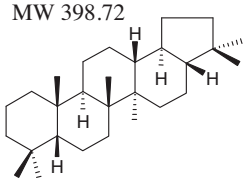
Ts (27Ts)
[55199-72-9] MW 370.67



2635.27-5UG neat, 1x5µg

2883.29 **17β(H),18α(H)-28-Norspergulane**

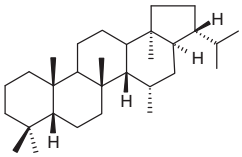
29Nsp
MW 398.72



2883.29-5UG neat, 1x5µg

2886.30 **17α(H)-30-Diahopane**

30D
MW 412.75



2886.30-5UG neat, 1x5µg

2889.3 **Rearranged hopane Kit**

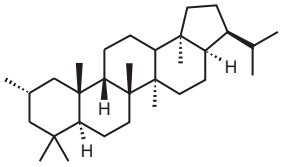
2889.3-KIT Kit

2-Methylhopanes

NEW

3826.31 **2α,17α(H),21α(H)-2-Methylhopane**

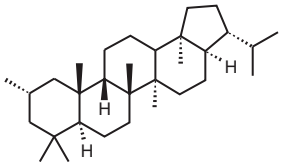
[126208-35-3] MW 426.78



3826.31-10UG neat, 1x10μg

3827.31 **2α,17α(H),21β(H)-2-Methylhopane**

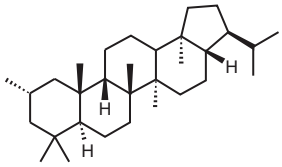
MW 426.78



3827.31-10UG neat, 1x10μg

3828.31 **2α,17β(H),21α(H)-2-Methylhopane**

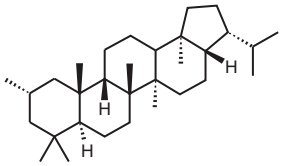
MW 426.78



3828.31-10UG neat, 1x10μg

3829.31 **2α,17β(H),21β(H)-2-Methylhopane**

MW 426.78



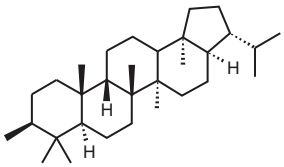
3829.31-10UG neat 1, 10μg

3-Methylhopanes

NEW

3716.31 **3α,17α(H),21β(H)-3-Methylhopane**

MW 426.78



3716.31-10UG neat, 1x10μg

3541.5 **2- and 3-Methylhopanes Kit**

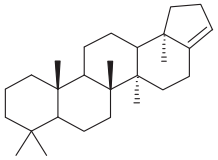
3541.5-KIT Kit

Hopenes

C27 Hopenes (trisnorhopenes)

1758.27 **22,29,30-Trisnorhop-17(21)-ene**

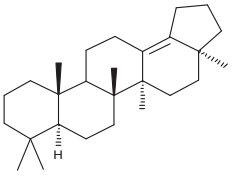
[65132-06-1] MW 368.65



1758.27-50-IO 50μg/mL isooctane, 1x1mL

0161.27 **22,29,30-Trisnorneohop-13(18)-ene**

[63543-60-2] MW 368.65



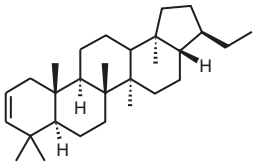
0161.27-50-05IO 50μg/mL isooctane, 1x0.5mL

C29 Hopenes (norhopenes)

3070.29 **17β(H),21α(H)-30-Norhop-2(3)-ene**

NEW

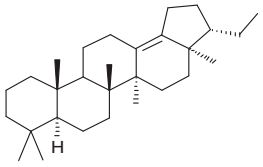
[10379-57-4] MW 396.71



3070.29-10UG neat, 1x10μg

0133.29 **30-Norhop-17(21)-ene**

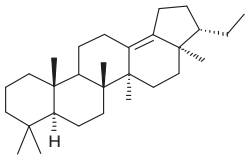
[10379-57-4] MW 396.71



0133.29-100-IO 100μg/mL isooctane. 1x1mL

0134.29 **30-Norneohop-13(18)-ene**

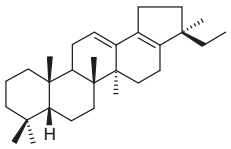
[72633-85-3] MW 396.71



0134.29-50-05IO 50μg/mL isooctane, 1x0.5mL

2885.29 **28-Nor-spergula-12(13), 17(18)-diene**

MW 394.69

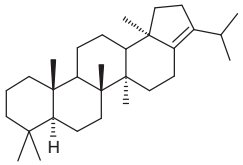


2885.29-5UG neat, 1x5μg

C30 Hopenes and fernenes

0789.30 **Hop-17(21)-ene**

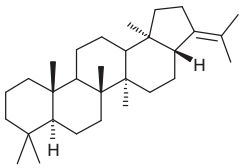
[546-99-6] MW 410.73



0789.30-100-IO 100µg/mL isooctane, 1x1mL

0699.30 **Hop-21(22)-ene**

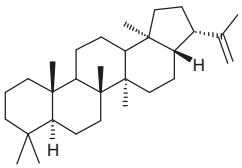
[1615-92-5] MW 410.73



0699.30-100-IO 100µg/mL isooctane, 1x1mL

0698.30 **Hop-22(29)-ene**

[1615-91-4] MW 410.73



0698.30-100-IO 100µg/mL isooctane, 1x1mL

0646.30 **Neohop-13(18)-ene**

[21681-17-4] MW 410.73

0646.30-100-IO 100µg/mL isooctane, 1x1mL

2887.30 **17α(H)-30-Diahop-13(14)-ene**

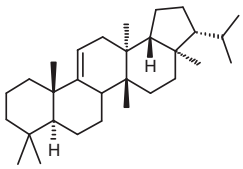
NEW

MW 410.73

2887.30-5UG neat, 1x5µg

0162.30 **Fern-9(11)-ene**

[1615-99-2] MW 410.73

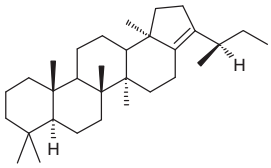


0162.30-100-IO 100µg/mL isooctane, 1x1mL

C31/C32 Hopenes (homohopenes/bishomohopenes)

0135.31 **(22R)-30-Homohop-17(21)-ene**

[80923-99-5] MW 424.76

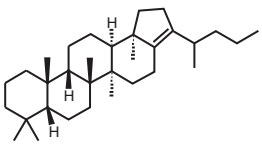


0135.31-50-05IO 50µg/mL isooctane, 1x0.5mL

3542.32 **(22RS)-30-Bishomohop-17(21)-ene**

NEW

MW 438.00



3542.32-5UG neat, 1x5µg

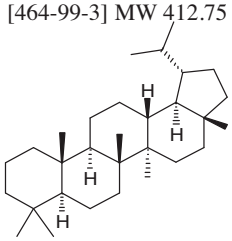
0647.14 **Hopene/Fernene Kit**

0647.14-KIT Kit

Lupanes

0616.30 **Lupane**

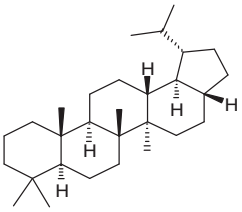
[464-99-3] MW 412.75



0616.30-100-IO 100μg/mL isooctane, 1x1mL

0689.29 **17β(H)-28-Norlupane**

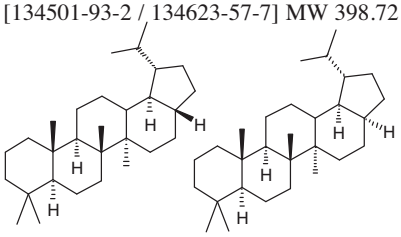
[134501-93-2] MW 398.72



0689.29-100-IO 100μg/mL isooctane, 1x1mL

0690.29 **28-Norlupane (17β(H)/17α(H))**

[134501-93-2 / 134623-57-7] MW 398.72



Contains: 33% 17α, 62% 17β

0690.29-100-IO 100μg/mL isooctane, 1x1mL

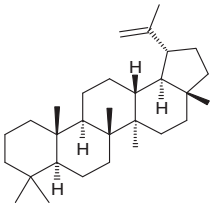
0691.3 **Lupane Kit**

0691.3-KIT Kit

Lupenes

0692.29 **Lup-20(29)-ene, 93%**

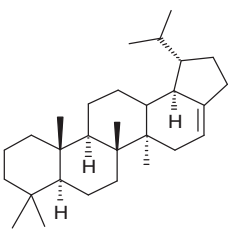
[1721-81-9] MW 410.73



0692.29-100-IO 100μg/mL isooctane, 1x1mL

0693.29 **28-Norlup-16(17)-ene, 94%**

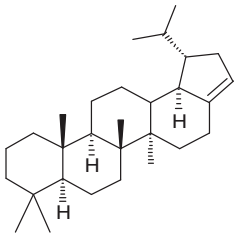
[53767-47-8] MW 396.71



0693.29-100-IO 100μg/mL isooctane, 1x1mL

0694.29 **28-Norlup-17(22)-ene**

[53767-52-5] MW 396.71



0694.29-100-IO 100μg/mL isooctane, 1x1mL

0695.3 **Lupene Kit**

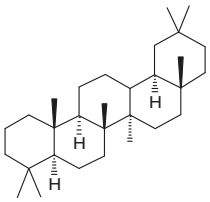
0695.3-KIT Kit

Oleananes

0617.30 **18α(H)-Oleanane**

18αO

[30759-92-3] MW 412.75

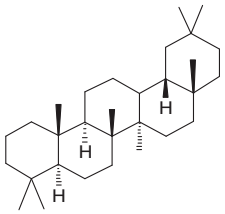


0617.30-100-IO 100µg/mL isooctane, 1x1mL

0618.30 **18β(H)-Oleanane**

18αO

[471-67-0] MW 412.75



0618.30-100-IO 100µg/mL isooctane, 1x1mL

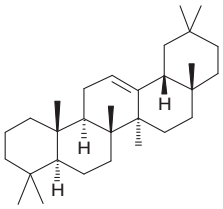
0696.2 **Oleanane Kit**

0696.2-KIT Kit

Ursenes and oleanenes

0787.30 **18β(H)-Olean-12(13)-ene**

[471-68-1] MW 410.73

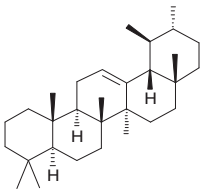


0787.30-100-IO 100µg/mL isooctane, 1x1mL

0787.30-2MG neat, 1x2mg

0786.30 **Urs-12(13)-ene**

[464-97-1] MW 410.73



0786.30-100-IO 100µg/mL isooctane, 1x1mL

0786.30-10MG neat, 1x10mg

0788.2 **Ursene/Oleanene Kit**

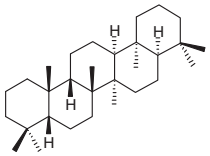
0788.2-KIT Kit

Gammacerane

NEW

2646.30 **Gammacerane**

G
[559-65-9] MW 412.75

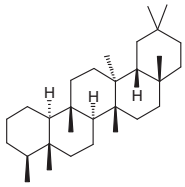


2646.30-10UG neat, 1x10µg

Other triterpanes

0619.30 **Friedelane, 91%**

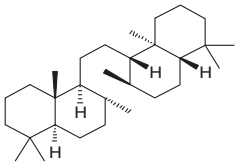
[559-73-9] MW 412.75



0619.30-100-IO 100µg/mL isooctane, 1x1mL

0620.30 **Onocerane I (8β(H),14α(H))**

[56297-92-8] MW 414.76

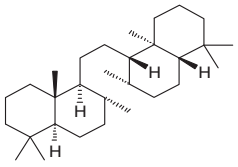


Contains: 84% onocerane I, 13% onocerane II

0620.30-100-IO 100µg/mL isooctane, 1x1mL

0621.30 **Onocerane II (8β(H),14β(H))**

[13384-96-8] MW 414.76

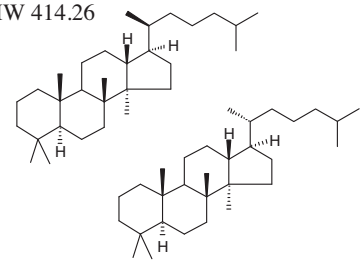


Contains: 86% onocerane I, 13% onocerane II

0621.30-100-IO 100µg/mL isooctane, 1x1mL

1192.30 **(20R/20S)-Dammarane (50/50)**

MW 414.26



1192.30-100-IO 100µg/mL isooctane, 1x1mL

0114.6 **Triterpane Kit (Other than hopanes)**

0114.6-KIT Kit

Other petroleum products

1025	Purified Asfalthenes	Please inquire	
2210.0-100ML	North sea oil - 1	neat	100mL

Naphthenic acids, cyclic aromatic and aliphatic acids

Monocyclic aliphatic acids

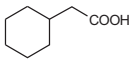
1816.7 **Cyclohexanecarboxylic acid**

[98-89-5] MW 128.17

1816.7-1G neat, 1x1g

1817.8 **Cyclohexylacetic acid**

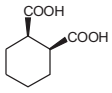
[5292-21-7] MW 142.20



1817.8-1G neat, 1x1g

1822.8 **cis-1,2-Cyclohexanedicarboxylic acid**

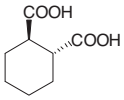
[610-09-3] MW 172.18



1822.8-1G neat, 1x1g

1824.8 **trans-1,2-Cyclohexanedicarboxylic acid**

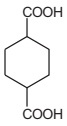
[46022-05-3] MW 172.18



1824.8-1G neat, 1x1g

1821.8 **1,4-Cyclohexanedicarboxylic acid**

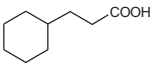
[1076-97-7] MW 172.18



1821.8-1G neat, 1x1g

1819.9 **3-Cyclohexylpropionic acid**

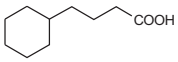
[701-97-3] MW 56.23



1819.9-1G neat, 1x1g

1818.10 **4-Cyclohexylbutyric acid**

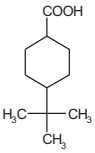
[4441-63-8] MW 170.25



1818.10-1G neat, 1x1g

1820.11 **4-tert-Butylcyclohexanecarboxylic acid**

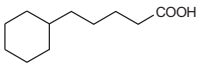
[5451-55-8] MW 184.28



1820.11-1G neat, 1x1g

1889.11 **5-Cyclohexylpentanoic acid**

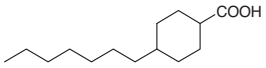
[5962-88-9] MW 184.28



1889.11-100MG neat, 1x100mg

1713.14 **4-Heptylcyclohexanecarboxylic acid**

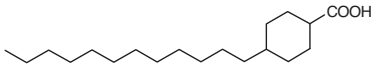
[38792-94-8] MW 226.36



1713.14-100MG neat, 1x100mg

F-7023 **4-n-Dodecylcyclohexanecarboxylic acid**

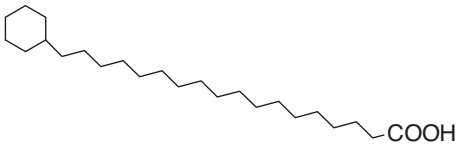
[871325-02-9] MW 296.50



F-7023-100MG neat, 1x100mg

2269.24 **18-Cyclohexyloctadecanoic acid**

[19708-98-6] MW 366.63

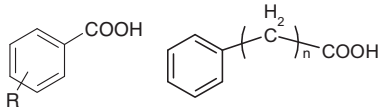


2269.24-10MG neat, 1x10mg

1914.12 **Monocyclic aliphatic acid Kit**

1914.12-KIT Kit

Monocyclic aromatic acids

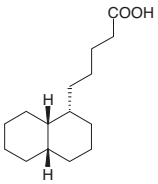


2130.7-1G	Benzoic acid	122.12	[65-85-0]	neat	1	1g
1836.8-1G	o-Toluic acid	136.15	[118-90-1]	neat	1	1g
1837.8-1G	m-Toluic acid	136.15	[99-04-7]	neat	1	1g
1838.8-1G	p-Toluic acid	136.15	[99-94-5]	neat	1	1g
1825.8-1G	Phenylacetic acid	136.15	[103-82-2]	neat	1	1g
2131.9-1G	2,4-Dimethylbenzoic acid	150.18	[611-01-8]	neat	1	1g
1826.9-1G	3-Phenylpropionic acid	150.18	[501-52-0]	neat	1	1g
1839.9-1G	4-Ethylbenzoic acid	150.18	[619-64-7]	neat	1	1g
1827.9-1G	DL-2-Phenylpropionic acid	150.18	[492-37-5]	neat	1	1g
1829.10-1G	2-Phenylbutyric acid	164.21	[90-27-7]	neat	1	1g
1890.10-1G	3-Phenylbutyric acid	164.21	[4593-90-2]	neat	1	1g
1840.10-1G	4-n-Propylbenzoic acid	164.21	[2438-05-3]	neat	1	1g
1828.10-1G	4-Phenylbutyric acid	164.21	[1821-12-1]	neat	1	1g
1834.11-1G	5-Phenylpentanoic acid	178.23	[2270-20-4]	neat	1	1g
1841.11-1G	4-n-Butylbenzoic acid	178.23	[20651-71-2]	neat	1	1g
1842.12-1G	4-n-Pentylbenzoic acid	192.26	[26311-45-5]	neat	1	1g
1835.12-100MG	6-Phenylhexanoic acid	192.26	[5581-75-9]	neat	1	100mg
1843.13-100MG	4-n-Hexylbenzoic acid	206.29	[21643-490-6]	neat	1	100mg
1844.14-1G	4-n-Heptylbenzoic acid	220.31	[38350-87-7]	neat	1	1g
1845.15-1G	4-n-Octylbenzoic acid	234.34	[3575-31-3]	neat	1	1g
F-7017-100MG	4-n-Dodecylbenzoic acid	290.45	[21021-55-6]	neat	1	100mg
2259.24-10MG	18-Phenyloctadecanoic acid	360.59	[19740-00-2]	neat	1	10mg
1916.22-KIT	Monocyclic aromatic acid Kit					Kit

Bicyclic aliphatic acid

1219.15 **1-Naphthalene pentanoic acid, decahydro**

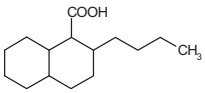
[64766-86-5] MW 238.37



1219.15-10MG neat, 1x10mg

1323.15 **2-Butyldecahydronaphthalene-1-carboxylic acid**

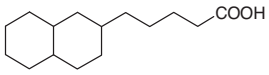
[663622-00-2] MW 238.37



Please inquire

2109.15 **2-Decahydronaphthalene pentanoic acid**

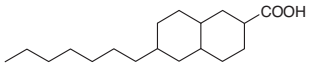
[909864-33-1] MW 238.37



2109.15-10MG neat, 1x10mg

1714.18 **6-Heptyldecahydronaphthalene-2-carboxylic acid**

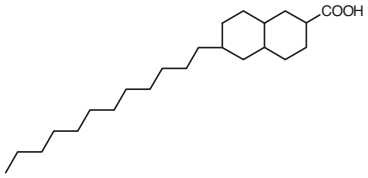
[82743-34-8] MW 280.45



1714.18-10MG neat, 1x10mg

2114.23 **6-n-Dodecyldecahydronaphthalene-2-carboxylic acid**

MW 350.59



2114.23-10MG neat, 1x10mg

1915.4 **Bicyclic aliphatic acid Kit**

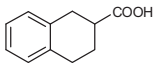
(Not including 1323.15)

1915.4-KIT Kit

Bicyclic aromatic acids

1888.11 **1,2,3,4-Tetrahydro-2-naphthoic acid**

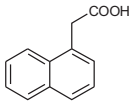
[53440-12-3] MW 176.22



1888.11-100MG neat, 1x100mg

1849.12 **1-Naphthylacetic acid**

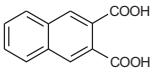
[86-87-3] MW 186.21



1849.12-1G neat, 1x1g

1847.12 **2,3-Naphthalenedicarboxylic acid**

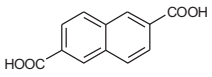
[2169-87-1] MW 216.20



1847.12-100MG neat, 1x100mg

1848.12 **2,6-Naphthalenedicarboxylic acid**

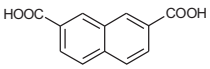
[1141-38-4] MW 216.20



1848.12-100MG neat, 1x100mg

1891.12 **2,7-Naphthalenedicarboxylic acid**

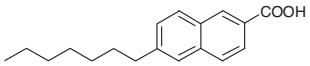
[2089-89-6] MW 216.20



1891.12-1G neat, 1x1g

1695.18 **6-n-Heptylnaphthalene-2-carboxylic acid**

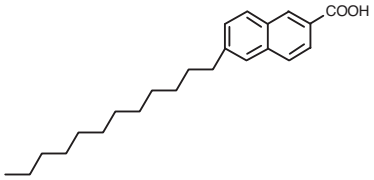
[66473-01-6] MW 270.37



1695.18-100MG neat, 1x100mg

2115.23 **6-n-Dodecylnaphthalene-2-carboxylic acid**

[871325-01-8] MW 340.51



2115.23-100MG neat, 1x100mg

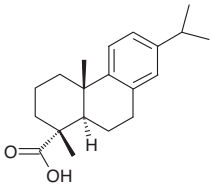
1917.7 **Bicyclic aromatic acid Kit**

1917.7-KIT Kit

Tricyclic aliphatic acids

2278.20 **Dehydroabietic acid**

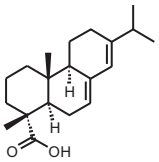
[1740-19-8] MW 300.44



2278.20-K-ME 1000µg/mL methanol, 1x1mL

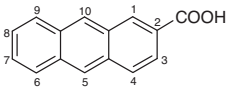
3718.20 **Abietic acid**

[514-10-3] MW 302.45



3718.20-K-ME 1000µg/mL methanol, 1x1mL

Tricyclic aromatic acids

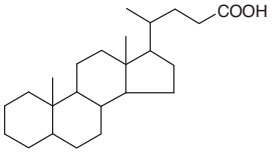


1850.15-100MG	1-Anthracenecarboxylic acid	222.25	[607-42-1]	neat	1	100mg
1851.15-100MG	2-Anthracenecarboxylic acid	222.25	[613-08-1]	neat	1	100mg
1852.15-1G	9-Anthracenecarboxylic acid	222.25	[723-62-6]	neat	1	1g
1853.16-100MG	1,8-Anthracenedicarboxylic acid	266.26	[38378-77-7]	neat	1	100mg

Tetracyclic aliphatic acids

1196.24 **5β-Cholanic acid**

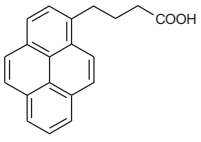
[546-18-9] MW 360.59



1196.24-10MG neat, 1x10mg

Tetracyclic aromatic acids

1846.20-1G	1-Pyrenebutyric acid	288.35	[3443-45-6]	neat	1	1g

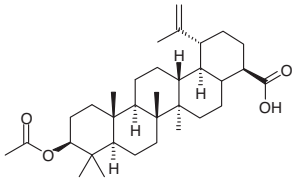


1918.5-KIT	Tri- and tetracyclic aromatic acid Kit	Kit
3719.3-KIT	Tri- and tetracyclic aliphatic acid Kit	Kit

Pentacyclic aliphatic acids

1618.33 **3β-Acetoxybetulinic acid**

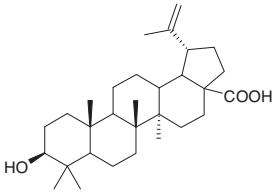
[10376-50-8] MW 512.78



1618.33-10MG neat, 1x10mg

1281.30 **Betulinic acid**

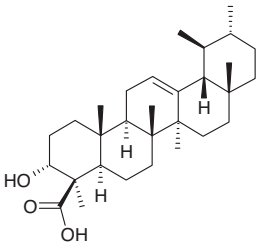
[472-15-1] MW 456.72



1281.30-10MG neat, 1x10mg

1617.30 **β-Boswellic acid**

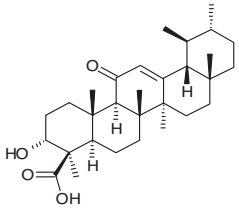
[631-69-6] MW 456.72



1617.30-10MG neat, 1x10mg

1619.30 **11-Keto-β-boswellic acid**

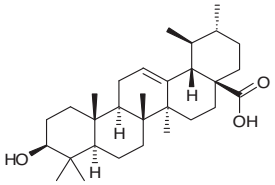
[17019-92-0] MW 470.70



1619.30-10MG neat, 1x10mg

1287.30 **Ursolic acid**

[77-52-1] MW 456.72

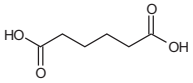


1287.30-10MG neat, 1x10mg

Dicarboxylic acids

2300.6 **Adipic acid**

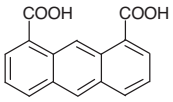
Hexanedioc acid
[124-04-9] MW 146.14



2300.6-1G neat, 1x1g

1853.16 **1,8-Anthracenedicarboxylic acid**

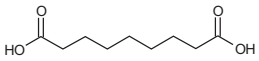
[38378-77-7] MW 266.26



1853.16-100MG neat, 1x100mg

2303.9 **Azelaic acid**

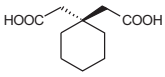
Nonanedioic acid
[123-99-9] MW 188.23



2303.9-1G neat, 1x1g

1823.10 **1,1-Cyclohexanediacetic acid**

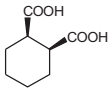
[4355-11-7] MW 200.24



1823.10-1G neat, 1x1g

1822.8 **cis-1,2-Cyclohexanedicarboxylic acid**

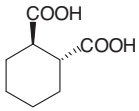
[610-09-3] MW 172.18



1822.8-1G neat, 1x1g

1824.8 **trans-1,2-Cyclohexanedicarboxylic acid**

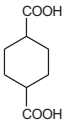
[46022-05-3] MW 172.18



1824.8-1G neat, 1x1g

1821.8 **1,4-Cyclohexanedicarboxylic acid**

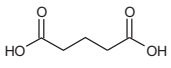
[1076-97-7] MW 172.18



1821.8-1G neat, 1x1g

2299.5 **Glutaric acid**

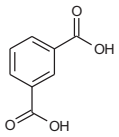
Pentadioic acid
[110-94-1] MW 132.12



2299.5-1G neat, 1x1g

2290.8 **Isophthalic acid**

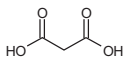
1,3-Benzenedicarboxylic acid
[121-91-5] MW 166.13



2290.8-1G neat, 1x1g

2295.3 **Malonic acid**

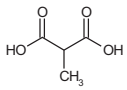
Propanedioic acid
[141-82-2] MW 104.06



2295.3-1G neat, 1x1g

2297.4 **Methylmalonic acid**

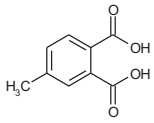
Methylpropanedioic acid
[516-05-2] MW 118.09



2297.4-1G neat, 1x1g

2292.9 **4-Methylphthalic acid**

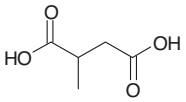
[4316-23-8] MW 180.16



2292.9-1G neat, 1x1g

2298.5 **Methylsuccinic acid**

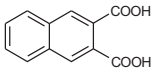
[498-21-5] MW 132.12



2298.5-1G neat, 1x1g

1847.12 **2,3-Naphthalenedicarboxylic acid**

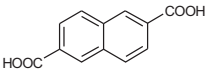
[2169-87-1] MW 216.20



1847.12-100MG neat, 1x100mg

1848.12 **2,6-Naphthalenedicarboxylic acid**

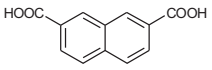
[1141-38-4] MW 216.20



1848.12-100MG neat, 1x100mg

1891.12 **2,7-Naphthalenedicarboxylic acid**

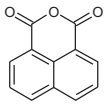
[2089-89-6] MW 216.20



1891.12-1G neat, 1x1g

2288.12 **1,8-Naphthalic anhydride**

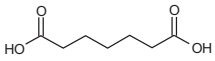
[81-84-5] MW 198.18



2288.12-1G neat, 1x1g

2301.7 **Pimelic acid**

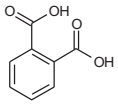
Heptanedioic acid
[111-16-0] MW 160.17



2301.7-1G neat, 1x1g

2289.8 **Phthalic acid**

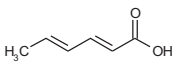
1,2-Benzenedicarboxylic acid
[88-99-3] MW 166.13



2289.8-1G neat, 1x1g

2881.6 **Sorbic acid**

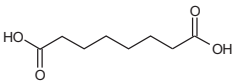
(E,E)-2,4-Hexadienoic acid
[110-44-1] MW 112.13



2881.6-1G neat, 1x1g

2302.8 **Suberic acid**

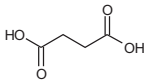
Octanedioc acid
[505-48-6] MW 174.20



2302.8-1G neat, 1x1g

2296.4 **Succinic acid**

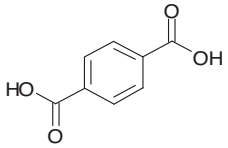
Butanedioic acid
[110-15-6] MW 118.09



2296.4-1G neat, 1x1g

2291.8 **Terephthalic acid**

1,4-Benzenedicarboxylic acid
[100-21-0] MW 166.13

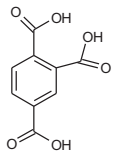


2291.8-1G neat, 1x1g

Tricarboxylic acids

2293.9 **Trimellitic acid**

1,2,4-Benzenetricarboxylic acid
[528-44-9] MW 210.14

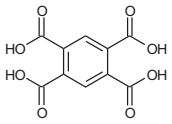


2293.9-1G neat, 1x1g

Tetracarboxylic acids

2294.10 **1,2,4,5-Benzenetetracarboxylic acid**

Pyrometillic acid
[89-05-4] MW 254.15



2294.10-1G neat, 1x1g

Compounds by functional groups

Aliphatic alcohols

2150.5-1ML	tert-Amylalcohol	88.15	[75-85-4]	neat		1	1mL
1376.4-5ML	1-Butanol	74.12	[71-36-3]	neat		1	5mL
1377.4-5ML	sec-Butanol	74.12	[78-92-2]	neat		1	5mL
2140.4-1ML	tert-Butanol	74.12	[75-65-01]	neat		1	1mL
2557.6-5G	2-Butoxyethanol	118.18	[111-76-2]	neat		1	5g
1711.10-5ML	1-Decanol	158.29	[112-30-1]	neat		1	5mL
1382.2-5ML	Ethanol	46.07	[64-17-5]	neat		1	5mL
2308.8-1ML	2-Ethyl-1-hexanol	130.23	[104-76-7]	neat		1	1mL
1373.7-5ML	1-Heptanol	116.20	[111-70-6]	neat		1	5mL
3607.7-1ML	4-Heptanol	116.20	[589-55-9]	neat		1	1mL
1285.26-K-IO	1-Hexacosanol	382.72	[506-52-5]	1000µg/mL	isooctane	1	1mL
1378.6-5ML	1-Hexanol	102.18	[111-27-3]	neat		1	5mL
3450.6-1ML	2-Hexanol	102.18	[626-93-7]	neat		1	1mL
3606.6-1ML	3-Hexanol	102.18	[623-37-0]	neat		1	1mL
1320.3-10ML	Isopropanol	60.10	[67-63-0]	neat		1	10mL
1379.1-5ML	Methanol	32.04	[67-56-1]	neat		1	5mL
2154.4-1ML	2-Methyl-1-propanol	74.12	[78-83-1]	neat		1	1mL
3605.5-1ML	DL-3-Methyl-2-butanol	88.15	[598-75-4]	neat		1	1mL
2735.6-1ML	4-Methyl-1-pentanol	102.18	[626-89-1]	neat		1	1mL
1284.28-K-IO	1-Octacosanol	410.77	[557-61-9]	1000µg/mL	isooctane	1	1mL
1372.8-5ML	1-Octanol	130.23	[111-87-5]	neat		1	5mL
1374.5-5ML	1-Pentanol	88.15	[71-41-0]	neat		1	5mL
1375.3-5ML	1-Propanol	60.10	[71-23-8]	neat		1	5mL
1920.23-KIT	Aliphatic alcohol Kit						Kit

Ethers/esters (see also fatty esters, pages 425-428)

2142.6-1ML	tert-Amyl methyl ether	102.18	[994-05-8]	neat		1	1mL
2053.14-2K-HX	Benzyl benzoate	212.25	[120-51-4]	2000µg/mL	hexane	1	1mL
2556.8-1G	2-Butoxyethyl acetate	160.21	[112-07-2]	neat		1	1g
2141.6-1ML	tert-Butyl ethyl ether ETBE, Ethyl t-butyl ether	102.18	[637-92-3]	neat		1	1mL
2151.5-1ML	tert-Butyl methyl ether MTBE, Methyl t-butyl ether	88.15	[1634-04-4]	neat		1	1mL
2143.6-1ML	Diisopropyl ether	102.18	[108-20-3]	neat		1	1mL

2901.11-1G	Dimethyl azelate	216.28	[1732-10-1]	neat		1	1g
2553.6-4ML	2-Ethoxyethyl acetate	132.16	[111-15-9]	neat		1	4mL
2879.5-1ML	Isopropyl acetate	102.13	[108-21-4]	neat		1	1mL
2880.3-1ML	Methyl acetate	74.08	[79-20-9]	neat		1	1mL
1381.2-1ML	Methyl formate	60.05	[107-31-3]	neat		1	1mL
F-7132.6-1G	2-Methoxy-1-propyl acetate		[70657-70-4]	neat		1	1 mL
2148.36-100MG	Stearyl stearate	536.97	[2778-96-3]	neat		1	100mg

Diols, glycols and derivatives

2261.2-10G	1,2-Ethanediol Ethylene glycol	62.07	[107-21-1]	neat		1	10g
3608.3-1ML	1,2-Propanediol	76.10	[57-55-6]	neat		1	1mL
3609.4-1ML	1,2-Butanediol	90.12	[584-03-2]	neat		1	1mL
3610.5-1ML	1,2-Pentandiol	104.15	[5343-92-0]	neat		1	1mL
3611.6-1ML	1,2-Hexanediol	118.18	[6920-22-5]	neat		1	1mL
2046.4-1ML	1,2-Dimethoxyethane	90.12	[110-71-4]	neat		1	1mL
2555.4-1G	2-Ethoxyethanol	90.12	[110-80-5]	neat		1	1g
2563.4-5ML	Diethylene glycol	106.12	[111-46-6]	neat		1	5mL
2564.6-5ML	Triethylene glycol	150.18	[112-27-6]	neat		1	5mL
2811.7-1G	Methyl acrylamido glycolate methyl ether MAGME	173.17	[77402-03-0]	neat		1	1g

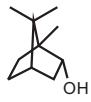
Aliphatic ketones

1371.4-1ML	2-Butanone	72.11	[78-93-3]	neat		1	1mL
1370.5-1ML	3-Pentanone	86.13	[96-22-0]	neat		1	1mL
2045.6-1ML	2-Hexanone	100.16	[591-78-6]	neat		1	1mL
1369.6-1ML	3-Hexanone	100.16	[589-38-8]	neat		1	1mL
2274.6-2K-ME	4-Methyl-2-pentanone	100.16	[108-10-1]	2000µg/mL	methanol	1	1mL
3612.7-1ML	2-Heptanone	114.19	[110-43-0]	neat		1	1mL
3613.7-1ML	3-Heptanone	114.19	[106-35-4]	neat		1	1mL
3614.8-1ML	3-Octanone	128.21	[106-68-3]	neat		1	1mL
1921.8-KIT	Aliphatic ketone Kit						Kit

Cyclic alcohols and ketones

3617.10 **L-(-)-Borneol**

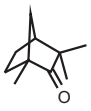
[464-45-9] MW 154.25



3617.10-K-IO 1000µg/mL isooctane, 1x1mL

3616.10 **L-(-)-Fenchone**

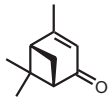
[7787-20-4] MW 152.24



3616.10-K-IO 1000µg/mL isooctane, 1x1mL

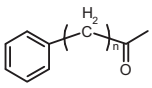
3615.10 **(S)-(-)-Verbenone**

[1196-01-6] MW 150.22



3615.10-K-IO 1000µg/mL isooctane, 1x1mL

Phenones

2751.8-1ML	Acetophenone	120.15	[98-86-2]	neat		1	1mL
2749.9-1ML	Propiophenone	134.18	[93-55-0]	neat		1	1mL
2758.10-1ML	n-Butyrophenone	148.21	[495-40-9]	neat		1	1mL
2750.11-1ML	n-Valerophenone Pentanophenone	162.23	[1009-14-9]	neat		1	1mL
2752.12-1ML	n-Hexanophenone	176.26	[942-92-7]	neat		1	1mL
2748.13-1ML	Benzophenone	182.22	[119-61-9]	neat		1	1mL
2757.13-1ML	n-Heptanophenone	190.29	[1671-75-6]	neat		1	1mL
2753.14-1ML	n-Octanophenone	204.31	[1674-37-9]	neat		1	1mL
3662.8-KIT	Phenone Kit						Kit

Amines

2754.8-1ML	Acetanilide	135.17	[103-84-4]	neat		1	1mL
2169.6-1ML	Aniline	93.13	[62-53-3]	neat		1	1mL
2765.6-1ML	4-Chloroaniline	127.57	[106-47-8]	neat		1	1mL
2763.7-1ML	4-Chloro-2-methylaniline	141.60	[95-69-2]	neat		1	1mL
2784.7-100-IO	2,4-Diaminoanisole	138.17	[615-05-4]	100µg/mL	isooctane	1	1mL
2784.7-10MG	2,4-Diaminoanisole	138.17	[615-05-4]	neat		1	10mg
2877.18-K-IO	Di-(3-phenyl-1-propyl)amine	253.39	[93948-20-0]	1000µg/mL	isooctane	1	1mL
2875.20-K-IO	N-Ethyl,N-(3-phenylpropyl)-3-(4-hydroxyphenyl)propylamine	297.44	[142047-94-7]	1000µg/mL	isooctane	1	1mL
2791.13-100-IO	4,4'-Methylenebis(2-chloroaniline)	267.16	[101-14-4]	100µg/mL	isooctane	1	1mL
2876.19-K-IO	N-(3-Phenylpropyl)-3-(4-hydroxyphenyl)propylamine	267.42		1000µg/mL	isooctane	1	1mL
1380.3-5ML	Trimethylamine	59.11	[75-50-3]	neat		1	5mL
2896.27-K-IO	Tri-(3-phenyl)-1-propylamine	371.57	[408309-07-9]	1000µg/mL	isooctane	1	1mL

Aromatic amines

2760.7-1ML	2,4-Diaminotoluene	122.17	[95-80-7]	neat		1	1mL
2788.8-100-IO	2-Methoxy-5-methylaniline	137.18	[120-71-8]	100µg/mL	isooctane	1	1mL
2759.7-1ML	o-Toluidine	107.16	[95-53-4]	neat		1	1mL
2790.9-100-IO	2,4,5-Trimethylaniline	135.21	[137-17-7]	100µg/mL	isooctane	1	1mL

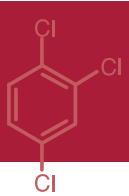
Chlorobenzenes

Internal standards

1957.6-K-IO	1,4-Dichlorobenzene-d4	147.00	[3855-82-1]	1000µg/mL	Isooctane	1	1mL
2727.6-100-IO	Hexachlorobenzene-13C6	284.78	[93952-14-8]	100µg/mL	isooctane	1	1mL
2047.6-K-ME	1-Chloro-4-fluorobenzene, Internal standard for Gasoline Range Analysis	130.55	[352-33-0]	1000µg/mL	methanol	1	1mL
2047.6-K-ME	1-Chloro-4-fluorobenzene, Internal standard for Gasoline Range Analysis	130.55	[352-33-0]	1000µg/mL	methanol	5	1mL

Native chlorobenzenes

3360.6-K-IO	Chlorobenzene	112.56	[108-90-7]	1000µg/mL	Isooctane	1	1mL
3360.6-100MG	Chlorobenzene	112.56	[108-90-7]	neat		1	100mg
3364.6-K-IO	1,2-Dichlorobenzene	147.00	[95-50-1]	1000µg/mL	Isooctane	1	1mL
3364.6-100MG	1,2-Dichlorobenzene	147.00	[95-50-1]	neat		1	100mg
3365.6-K-IO	1,3-Dichlorobenzene	147.00	[541-73-1]	1000µg/mL	Isooctane	1	1mL
3365.6-100MG	1,3-Dichlorobenzene	147.00	[541-73-1]	neat		1	100mg
3366.6-K-IO	1,4-Dichlorobenzene	147.00	[106-46-7]	1000µg/mL	Isooctane	1	1mL
3366.6-100MG	1,4-Dichlorobenzene	147.00	[106-46-7]	neat		1	100mg
3330.6-K-IO	1,2,3-Trichlorobenzene	181.45	[87-61-6]	1000µg/mL	Isooctane	1	1mL
3330.6-100MG	1,2,3-Trichlorobenzene	181.45	[87-61-6]	neat		1	100mg



3519.6-K-IO	1,2,4-Trichlorobenzene	181.45	[120-82-1]	1000µg/mL	Isooctane	1	1mL
3519.6-100MG	1,2,4-Trichlorobenzene	181.45	[120-82-1]	neat		1	100mg
3749.6-K-IO	1,3,5-Trichlorobenzene	181.45	[108-70-3]	1000µg/mL	Isooctane	1	1mL
3749.6-100MG	1,3,5-Trichlorobenzene	181.45	[108-70-3]	neat		1	100mg
3750.6-K-IO	1,2,3,4-Tetrachlorobenzene	215.89	[634-66-2]	1000µg/mL	Isooctane	1	1mL
3750.6-100MG	1,2,3,4-Tetrachlorobenzene	215.89	[634-66-2]	neat		1	100mg
3751.6-K-IO	1,2,3,5-Tetrachlorobenzene	215.89	[634-90-2]	1000µg/mL	Isooctane	1	1mL
3751.6-100MG	1,2,3,5-Tetrachlorobenzene	215.89	[634-90-2]	neat		1	100mg
3656.6-K-IO	1,2,4,5-Tetrachlorobenzene	215.89	[95-94-3]	1000µg/mL	Isooctane	1	1mL
3656.6-100MG	1,2,4,5-Tetrachlorobenzene	215.89	[95-94-3]	neat		1	100mg
2025.6-K-IO	Pentachlorobenzene	250.34	[608-93-5]	1000µg/mL	isooctane	1	1mL
2025.6-1ML	Pentachlorobenzene	250.34	[608-93-5]	neat		1	1mL
2025.6-5ML	Pentachlorobenzene	250.34	[608-93-5]	neat		1	5mL
1356.6-K-IO	Hexachlorobenzene	284.78	[118-74-1]	1000µg/mL	isooctane	1	1mL
1356.6-1G	Hexachlorobenzene	284.78	[118-74-1]	neat		1	1g
3664.12-KIT-N	Chlorobenzene Kit (Natives neat)						Kit
3664.12-KIT-S	Chlorobenzene Kit (Natives in solution)				Solutions		Kit

Bromobenzenes

2157.6-50-IO	Bromobenzene	Monobromobenzene	157.01	[106-86-1]	50µg/mL	isooctane	1	1mL
2157.6-1ML	Bromobenzene	Monobromobenzene	157.01	[106-86-1]	neat		1	1mL
3657.6-50-IO	1,2-Dibromobenzene		235.90	[583-53-9]	50µg/mL	isooctane	1	1mL
3657.6-1ML	1,2-Dibromobenzene		235.90	[583-53-9]	neat		1	1mL
3658.6-50-IO	1,3-Dibromobenzene		235.90	[108-36-1]	50µg/mL	isooctane	1	1mL
3658.6-1ML	1,3-Dibromobenzene		235.90	[108-36-1]	neat		1	1mL
3659.6-50-IO	1,4-Dibromobenzene		235.90	[106-37-6]	50µg/mL	isooctane	1	1mL
3659.6-1ML	1,4-Dibromobenzene		235.90	[106-37-6]	neat		1	1mL
3964.6-50-IO	1,2,4-Tribromobenzene		314.79	[615-54-3]	50µg/mL	isooctane	1	1mL
3964.6-1ML	1,2,4-Tribromobenzene		314.79	[615-54-3]	neat		1	1mL
3660.6-50-IO	1,3,5-Tribromobenzene		314.80	[626-39-1]	50µg/mL	isooctane	1	1mL
3660.6-1ML	1,3,5-Tribromobenzene		314.80	[626-39-1]	neat		1	1mL
3665.6-50-IO	1,2,4,5-Tetrabromobenzene		393.70	[636-28-2]	50µg/mL	isooctane	1	1mL
2673.7-50-IO	Pentabromotoluene		486.62	[87-83-2]	50µg/mL	isooctane	1	1mL
2678.6-50-IO	Hexabromobenzene		551.49	[87-82-1]	50µg/mL	isooctane	1	1mL
3666.8-KIT	Bromobenzene Kit							Kit

Ammonium halides

2358.4-100-ME	Tetramethylammonium bromide	154.05	[64-20-0]	100µg/mL	methanol	1	1mL
2354.8-100-ME	Tetraethylammonium bromide	210.16	[71-91-0]	100µg/mL	methanol	1	1mL
2352.16-100-ME	Tetrabutylammonium bromide	322.38	[1643-19-2]	100µg/mL	methanol	1	1mL
2357.24-100-ME	Tetrahexylammonium bromide	434.59	[4328-13-6]	100µg/mL	methanol	1	1mL
2353.32-100-ME	Tetraoctylammonium bromide	546.81	[14866-33-2]	100µg/mL	methanol	1	1mL
2356.48-100-ME	Tetradodecylammonium bromide	771.24	[14866-34-3]	100µg/mL	methanol	1	1mL
2355.72-100-ME	Tetraoctadecylammonium bromide	1107.89	[63462-99-7]	100µg/mL	methanol	1	1mL

Sulfur compounds

Thiols

Alkanethiols

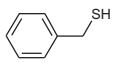
0184.2-1ML	Ethanethiol	62.13	[75-08-1]	neat	1	1mL
0189.3-1ML	1-Propanethiol	76.16	[107-03-9]	neat	1	1mL
0187.3-1ML	2-Propanethiol	76.16	[75-33-2]	neat	1	1mL
0194.4-1ML	1-Butanethiol	90.19	[109-75-5]	neat	1	1mL
0191.4-1ML	2-Butanethiol	90.19	[513-53-1]	neat	1	1mL
0192.4-1ML	2-Methyl-1-propanethiol	90.19	[513-44-0]	neat	1	1mL
0188.4-1ML	2-Methyl-2-propanethiol	90.19	[75-66-1]	neat	1	1mL
0080.5-1ML	1-Pentanethiol	104.22	[110-66-7]	neat	1	1mL
0081.5-1ML	2-Methyl-1-butanethiol	104.22	[1878-18-8]	neat	1	1mL
0083.5-100MG	2-Methyl-2-butanethiol	104.22	[1679-09-0]	neat	1	100mg
0083.5-5ML	2-Methyl-2-butanethiol	104.22	[1679-09-0]	neat	1	5mL
0082.5-1ML	3-Methyl-1-butanethiol	104.22	[541-31-1]	neat	1	1mL
0084.5-100MG	3-Methyl-2-butanethiol	104.22	[2084-18-6]	neat	1	100mg
0084.5-5ML	3-Methyl-2-butanethiol	104.22	[2084-18-6]	neat	1	5mL
0086.6-100MG	1-Hexanethiol	118.24	[111-31-9]	neat	1	100mg
0086.6-5ML	1-Hexanethiol	118.24	[111-31-9]	neat	1	5mL
0088.6-100MG	2,3-Dimethyl-2-butanethiol	118.24	[1639-01-6]	neat	1	100mg
0088.6-5ML	2,3-Dimethyl-2-butanethiol	118.24	[1639-01-6]	neat	1	5mL
0087.6-100MG	2-Methyl-2-pentanethiol	118.24	[1633-97-2]	neat	1	100mg
0087.6-5ML	2-Methyl-2-pentanethiol	118.24	[1633-97-2]	neat	1	5mL
0089.7-1ML	1-Heptanethiol	132.27	[1639-09-4]	neat	1	1mL
0089.7-100MG	1-Heptanethiol	132.27	[1639-09-4]	neat	1	100mg
0090.8-1ML	1-Octanethiol	146.30	[111-88-6]	neat	1	1mL
0091.9-1ML	1-Nonanethiol	160.32	[1455-21-6]	neat	1	1mL
0092.10-1ML	1-Decanethiol (96%)	174.35	[143-10-2]	neat	1	1mL
0092.10-1ML	1-Decanethiol (99%)	174.35	[143-10-2]	neat	1	1mL
1911.19-KIT	Alkanethiol Kit (100mg of 83.5/84.5/86.6/87.6/88.6/89.7)				Kit	

Cycloalkanethiols

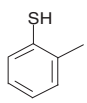
0093.5-1ML	Cyclopentanethiol	102.20	[1679-07-8]	neat	1	1mL
0094.6-1ML	Cyclohexanethiol	116.23	[1569-69-3]	neat	1	1mL
1067.2-KIT	Cycloalkylthiol Kit					Kit

Thiophenols

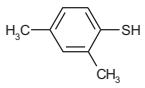
0095.6-1ML	Thiophenol	110.18	[108-98-5]	neat	1	1mL
0096.7-1ML	alpha-Toluenethiol	124.21	[100-53-8]	neat	1	1mL

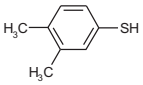
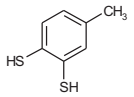


1052.7-1ML	o-Thiocresol	124.21	[137-06-4]	neat	1	1mL



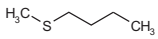
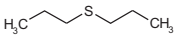
1053.7-1ML	m-Thiocresol	124.21	[108-40-7]	neat	1	1mL
1054.7-100MG	p-Thiocresol	124.21	[106-54-6]	neat	1	100mg
1056.8-100MG	2,4-Dimethylthiophenol	138.23	[13616-82-5]	neat	1	100mg



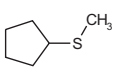
1057.8-100MG	2,5-Dimethylthiophenol	138.23	[4001-61-0]	neat		1	100mg
1055.8-100MG	2,6-Dimethylthiophenol	138.23	[118-72-9]	neat		1	100mg
1058.8-100MG	3,4-Dimethylthiophenol	138.23	[18800-53-8]	neat		1	100mg
							
1059.8-100MG	3,5-Dimethylthiophenol	138.23	[38360-81-5]	neat		1	100mg
1060.8-100MG	2-Ethylthiophenol	138.23	[4500-58-7]	neat		1	100mg
2174.8-1ML	3-Ethylbenzenethiol	138.23	[62154-77-2]	neat		1	1mL
1061.8-100MG	4-Ethylthiophenol	138.23	[4946-13-8]	neat		1	100mg
1062.9-100MG	4-Isopropylthiophenol	152.26	[4946-14-9]	neat		1	100mg
1347.7-K-AC	3,4-Dimercaptotoluene	156.27	[496-74-2]	1000µg/mL	acteone	1	1mL
							
1063.15-KIT	Thiophenol Kit						Kit

Sulfides

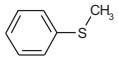
Aliphatic sulfides

2139.2-1ML	Ethylene sulfide	60.12	[420-12-2]	neat		1	1mL
							
0185.2-1ML	Dimethylsulfide	62.13	[75-18-3]	neat		1	1mL
0190.3-1ML	Ethylmethylsulfide	76.16	[624-89-5]	neat		1	1mL
0193.4-1ML	Diethylsulfide	90.19	[352-93-2]	neat		1	1mL
0098.4-1ML	Methylisopropylsulfide	90.19	[1551-21-9]	neat		1	1mL
0097.4-1ML	Methyl-n-propylsulfide	90.19	[3877-15-4]	neat		1	1mL
1000.5-1ML	Ethyl-n-propylsulfide	104.22	[4110-50-3]	neat		1	1mL
0099.5-100MG	Methyl-n-butylsulfide	104.22	[628-29-5]	neat		1	100mg
							
0099.5-5ML	Methyl-n-butylsulfide	104.22	[628-29-5]	neat		1	5mL
1001.5-100MG	Methyl-tert-butylsulfide	104.22	[97759-61-0]	neat		1	100mg
1001.5-5ML	Methyl-tert-butylsulfide	104.22	[97759-61-0]	neat		1	5mL
1002.6-1ML	Di-n-propylsulfide	118.24	[111-47-7]	neat		1	1mL
							
1003.6-1ML	Diisopropylsulfide	118.24	[625-80-9]	neat		1	1mL
0200.8-1ML	Di-n-butylsulfide	146.30	[544-40-1]	neat		1	1mL
1004.8-1ML	Di-tert-butylsulfide	146.30	[107-47-1]	neat		1	1mL
1222.16-1G	Di-n-octylsulfide	258.51	[2690-08-6]	neat		1	1g
1912.14-KIT	Thioalkane Kit						Kit

Cycloalkylthioalkanes

1005.6-100MG	Cyclopentylmethylsulfide	116.23	[7133-36-0]	neat		1	100mg
							
1005.6-5ML	Cyclopentylmethylsulfide	116.23	[7133-36-0]	neat		1	5mL

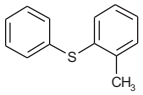
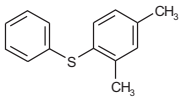
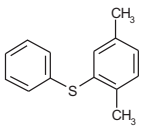
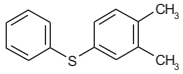
Phenylthioalkanes

1006.7-1ML	Methylphenylsulfide	124.21	[100-68-5]	neat		1	1mL
							
1007.8-1ML	Ethylphenylsulfide	138.23	[622-38-8]	neat		1	1mL

Thiocycloalkanes

1008.3-1ML	Trimethylenesulfide	74.15	[287-27-4]	neat		1	1mL
							
0169.4-1ML	Tetrahydrothiophene	88.17	[110-01-0]	neat		1	1mL
							
1334.5-100MG	2-Methyltetrahydrothiophene	102.20	[1795-09-1]	neat		1	100mg
1334.5-1ML	2-Methyltetrahydrothiophene	102.20	[1795-09-1]	neat		1	1mL
1009.5-100MG	3-Methyltetrahydrothiophene	102.20	[4740-00-5]	neat		1	100mg
1009.5-5ML	3-Methyltetrahydrothiophene	102.20	[4740-00-5]	neat		1	5mL
1010.5-100MG	Thiocyclohexane	102.20	[1613-51-0]	neat		1	100mg
1010.5-5ML	Thiocyclohexane	102.20	[1613-51-0]	neat		1	5mL
1913.5-KIT	Thiocycloalkane Kit						Kit
2789.12-100-IO	4,4'-Thiodianiline	216.31	[139-65-1]	100µg/mL	isooctane	1	1mL

Diphenylsulfides

0907.12-500-IO	Diphenylsulfide	186.28	[139-66-2]	500µg/mL	isooctane	1	1mL
0888.13-500-IO	2-Methyldiphenylsulfide	200.30	[13963-35-4]	500µg/mL	isooctane	1	1mL
							
0889.13-500-IO	3-Methyldiphenylsulfide	200.30	[13865-48-0]	500µg/mL	isooctane	1	1mL
0891.13-500-IO	4-Methyldiphenylsulfide	200.30	[3699-01-2]	500µg/mL	isooctane	1	1mL
0917.14-500-IO	2,4-Dimethyldiphenylsulfide	214.33	[16704-47-5]	500µg/mL	isooctane	1	1mL
							
0916.14-500-IO	2,5-Dimethyldiphenylsulfide	214.33	[16704-47-3]	500µg/mL	isooctane	1	1mL
							
0940.14-500-IO	3,4-Dimethyldiphenylsulfide	214.33	[2828-65-1]	500µg/mL	isooctane	1	1mL
							
0893.7-KIT	Diphenylsulfide Kit						Kit

Polysulfur compounds

Polysulfur Kit I

0195.2 **Dimethyldisulfide**
[624-92-0] MW 94.20

0195.2-1G neat, 1x1g

1011.4 **1,3-Dithiane**
[505-23-7] MW 120.24

1011.4-1G neat, 1x1g

1754.4 **1,4-Dithiane**
[505-29-3] MW 120.24

1754.4-1G neat, 1x1g

0196.4 **Diethyldisulfide**
[110-81-6] MW 122.25

0196.4-1G neat, 1x1g

1014.4 **Methylpropyldisulfide**
[2179-60-4] MW 122.25

1014.4-1G neat, 1x1g

1012.6 **Di-n-propyldisulfide**
[629-19-6] MW 150.31

1012.6-1G neat, 1x1g

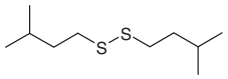
1755.8 **Di-n-butyldisulfide**
[629-45-8] MW 178.36

1755.8-1G neat, 1x1g

1013.8 **Di-tert-butyldisulfide**
[110-06-5] MW 178.36

1013.8-1ML neat, 1x1mL

1757.10 **Diisopentyldisulfide**
Diisoamildisulphide
[2051-04-9] MW 206.41

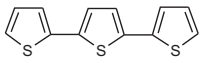


1757.10-1G neat, 1x1g
1757.10-K-IO 1000µg/mL isooctane, 1x1mL

1756.10 **Di-n-pentyldisulfide**
[112-51-6] MW 206.41

1756.10-1G neat, 1x1g

0491.12 **2,2′,5′,2″-Terthiophene**
[1081-34-1] MW 248.39

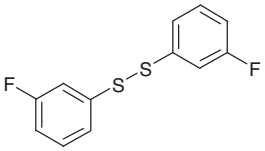


0491.12-K-IO 1000µg/mL, isooctane, 1x1mL

2716.12 **m-Difluorodiphenyldisulfide**

Bis(3-fluorophenyl)disulfide

[63930-17-6] MW 254.32



2716.12-K-IO 1000μg/mL isooctane, 1x1mL

1797.14 **Di-n-heptyldisulfide**

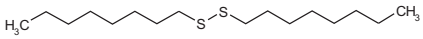
[10496-16-9] MW 262.52

1797.14-K-IO 1000μg/mL isooctane, 1x1mL

1797.14-1G neat, 1x1g

1799.16 **Di-n-octyldisulfide**

[822-27-5] MW 290.58



1799.16-K-IO 1000μg/mL isooctane, 1x1mL

1799.16-100MG neat, 1x100mg

1798.20 **Di-n-decyldisulfide**

[10496-18-1] MW 346.69

1798.20-1G neat, 1x1g

1221.36 **Di-n-octadecyldisulfide**

[2500-88-1] MW 571.12

1221.36-K-IO 1000μg/mL isooctane, 1x1mL

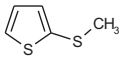
0476.16 **Polysulfur Kit I**

0476.16-KIT Kit

Polysulfur Kit II

0367.5 **2-(Methylthio)thiophene**

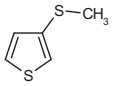
[5780-36-9] MW 130.23



0367.5-100MG neat, 1x100mg

0368.5 **3-(Methylthio)thiophene**

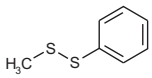
[20731-74-2] MW 130.23



0368.5-100MG neat, 1x100mg

1016.7 **Methylphenyldisulfide**

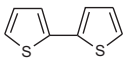
[14173-25-2] MW 156.27



1016.7-1G neat, 1x1g

0490.8 **2,2'-Dithienyl**

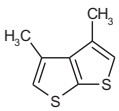
[492-97-7] MW 166.27



0490.8-K-IO 1000µg/mL isooctane, 1x1mL

0364.8 **3,4-Dimethylthieno[2,4-b] thiophene**

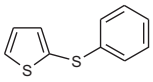
[17502-58-1] MW 168.28



0364.8-K-IO 1000µg/mL isooctane, 1x1mL

0488.10 **2-(Phenylthio)thiophene**

[16718-12-0] MW 192.30



0488.10-K-IO 1000µg/mL isooctane, 1x1mL

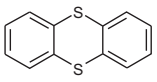
0489.10 **3-(Phenylthio)thiophene**

[16718-11-9] MW 192.30

0489.10-K-IO 1000µg/mL isooctane, 1x1mL

0366.12 **Thianthrene**

[92-85-3] MW 216.33



0366.12-K-IO 1000µg/mL isooctane, 1x1mL

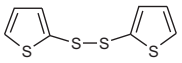
1015.12 **Diphenyldisulfide**

[882-33-7] MW 218.34

1015.12-K-IO 1000µg/mL isooctane, 1x1mL

0492.8 **Di(2-thienyl)disulfide**

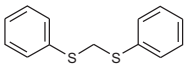
[6911-51-9] MW 230.39



0492.8-K-IO 1000µg/mL isooctane, 1x1mL

1018.13 **Bis(phenylthio)methane**

[3561-67-9] MW 232.37



1018.13-K-IO 1000µg/mL isooctane, 1x1mL

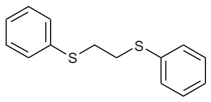
1796.12 **Di-n-hexyldisulfide**

[10496-15-8] MW 234.47

1796.12-1G neat, 1x1g

1017.14 **1,2-Bis(phenylthio)ethane**

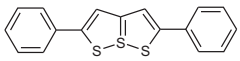
[622-20-8] MW 246.40



1017.14-K-IO 1000μg/mL isooctane, 1x1mL

0365.17 **2,5-Diphenyl-1,6,6a-trithiapentalene**

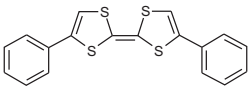
[103-90-5] MW 312.48



0365.17-K-T 1000μg/mL toluene, 1x1mL

0369.18 **4,4'-Diphenyltetrathiafulvalene**

[5152-94-2] MW 356.55



0369.18-K-T 1000μg/mL toluene, 1x1mL

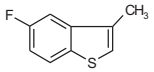
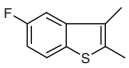
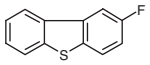
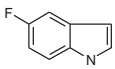
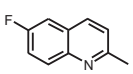
1064.15 **Polysulfur Kit II**

1064.15-KIT Kit

PAHs

Internal standards

F-PAHs®

1313.10-10-IO	1-Fluoronaphthalene		146.17	[321-38-0]	10µg/mL	isooctane	1	1mL
1313.10-100-IO	1-Fluoronaphthalene		146.17	[321-38-0]	100µg/mL	isooctane	1	1mL
1313.10-100-IO	1-Fluoronaphthalene		146.17	[321-38-0]	100µg/mL	isooctane	5	1mL
2364.11-100-IO	2-Fluoro-6-methylnaphthalene		160.19	[324-42-5]	100µg/mL	isooctane	1	1mL
1314.12-10-T	5-Fluoroacenaphthylene		170.19	[17521-01-6]	10µg/mL	toluene	1	1mL
1314.12-100-T	5-Fluoroacenaphthylene		170.19	[17521-01-6]	100µg/mL	toluene	1	1mL
1314.12-100-T	5-Fluoroacenaphthylene		170.19	[17521-01-6]	100µg/mL	toluene	5	1mL
1315.13-10-T	2-Fluorofluorene		184.22	[343-43-1]	10µg/mL	toluene	1	1mL
1315.13-100-T	2-Fluorofluorene		184.22	[343-43-1]	100µg/mL	toluene	1	1mL
1606.13-10MG	2-Fluorodiphenylmethane		186.23	[3794-15-8]	neat		1	10mg
1607.13-10MG	4-Fluorodiphenylmethane		186.23	[587-79-1]	neat		1	10mg
1328.14-10-T	2-Fluorophenanthrene		196.23	[523-41-1]	10µg/mL	toluene	1	1mL
1328.14-100-T	2-Fluorophenanthrene		196.23	[523-41-1]	100µg/mL	toluene	1	1mL
1316.14-10-T	3-Fluorophenanthrene		196.23	[440-40-4]	10µg/mL	toluene	1	1mL
1316.14-100-T	3-Fluorophenanthrene		196.23	[440-40-4]	100µg/mL	toluene	1	1mL
2873.15-50-IO	3-Fluoro-6-methylphenanthrene		210.25	[84194-32-2]	50µg/mL	isooctane	1	1mL
1319.16-10-T	3-Fluorofluoranthene		220.25	[1691-66-3]	10µg/mL	toluene	1	1mL
1319.16-100-T	3-Fluorofluoranthene		220.25	[1691-66-3]	100µg/mL	toluene	1	1mL
1319.16-100-T	3-Fluorofluoranthene		220.25	[1691-66-3]	100µg/mL	toluene	5	1mL
1318.16-10-T	1-Fluoropyrene		220.25	[1691-65-2]	10µg/mL	toluene	1	1mL
1318.16-100-T	1-Fluoropyrene		220.25	[1691-65-2]	100µg/mL	toluene	1	1mL
1900.18-10-T	1-Fluorochrysene		246.29		10µg/mL	toluene	1	1mL
1900.18-100-T	1-Fluorochrysene		246.29		100µg/mL	toluene	1	1mL
1317.18-10-T	3-Fluorochrysene		246.29	[36288-22-9]	10µg/mL	toluene	1	1mL
1317.18-100-T	3-Fluorochrysene		246.29	[36288-22-9]	100µg/mL	toluene	1	1mL
2872.19-50-IO	9-Fluoro-5-methylchrysene		260.31	[64977-46-8]	50µg/mL	isooctane	1	1mL
1322.20-10-T	9-Fluorobenzo[k]fluoranthene		270.31	[113600-15-0]	10µg/mL	toluene	1	1mL
1322.20-100-T	9-Fluorobenzo[k]fluoranthene		270.31	[113600-15-0]	100µg/mL	toluene	1	1mL
1602.9-100-IO	5-Fluoro-3-methylbenzo [b]thiophene 	F-3MBT	166.22	[17514-63-5]	100µg/mL	isooctane	1	1mL
2739.10-100-IO	5-Fluoro-2,3-dimethylbenzothiophene 	F-2,3DMBT	180.25		100µg/mL	isooctane	1	1mL
1692.12-100-T	2-Fluorodibenzothiophene 	F-DBT	202.25	[177586-38-8]	100µg/mL	toluene	1	1mL
1692.12-100-T	2-Fluorodibenzothiophene		202.25	[177586-38-8]	100µg/mL	toluene	5	1mL
1692.12-100-T	2-Fluorodibenzothiophene		202.25	[177586-38-8]	100µg/mL	toluene	10	1mL
1603.8-K-IO	5-Fluoroindole 		135.14	[399-52-0]	1000µg/mL	isooctane	1	1mL
3543.10-K-IO	6-Fluoro-2-methylquinoline 		161.18	[1128-61-6]	1000µg/mL	isooctane	1	1mL

Hydroxy- and methoxyF-PAHs®

1923.14-10MG	3-Fluoro-6-hydroxyphenanthrene	212.23		neat		1	10mg
2207.18-10MG	1-Fluoro-3-hydroxychrysene	262.29		neat		1	10mg
2227.18-10MG	1-Fluoro-4-hydroxychrysene	262.29		neat		1	10mg
2208.18-10MG	3-Fluoro-2-hydroxychrysene	262.29		neat		1	10mg
1947.19-10MG	1-Fluoro-3-methoxychrysene	276.31		neat		1	10mg
1946.19-10MG	3-Fluoro-2-methoxychrysene	276.31		neat		1	10mg
1948.19-10MG	3-Fluoro-4-methoxychrysene	276.31		neat		1	10mg
1945.19-10MG	4-Fluoro-1-methoxychrysene	276.31		neat		1	10mg
3544.10-10MG	6-Fluoro-4-hydroxy-2-methylquinoline	177.18	[15912-68-2]	neat			10mg

Deuterated PAHs and biphenyls

1532.10-100MG	Naphthalene-1-d1	129.18	[865-62-7]	neat		1	100mg
1533.10-100MG	Naphthalene-1,4-d2	130.19	[1683-98-3]	neat		1	100mg
0978.10-K-IO	Naphthalene-d8	136.22	[1146-65-2]	1000µg/mL	isooctane	1	1mL
0978.10-K-IO	Naphthalene-d8	136.22	[1146-65-2]	1000µg/mL	isooctane	5	1mL
0978.10-K-IO	Naphthalene-d8	136.22	[1146-65-2]	1000µg/mL	isooctane	10	1mL
0978.10-K-T	Naphthalene-d8	136.22	[1146-65-2]	1000µg/mL	toluene	1	1mL
0978.10-K-T	Naphthalene-d8	136.22	[1146-65-2]	1000µg/mL	toluene	5	1mL
0978.10-K-T	Naphthalene-d8	136.22	[1146-65-2]	1000µg/mL	toluene	10	1mL
0978.10-10MG	Naphthalene-d8	136.22	[1146-65-2]	neat		1	10mg
0387.11-K-IO	1-Methylnaphthalene-d10	152.26	[38072-94-5]	1000µg/mL	isooctane	1	1mL
0387.11-K-IO	1-Methylnaphthalene-d10	152.26	[38072-94-5]	1000µg/mL	isooctane	10	1mL
1345.11-K-IO	2-Methylnaphthalene-d10	152.26	[7297-45-2]	1000µg/mL	isooctane	1	1mL
0388.12-K-IO	1,8-Dimethylnaphthalene-d12	168.30	[104489-29-4]	1000µg/mL	isooctane	5	1mL
1344.12-K-IO	2,6-Dimethylnaphthalene-d12	168.30	[350820-12-1]	1000µg/mL	isooctane	1	1mL
1336.12-K-T	Acenaphthylene-d8	160.25	[93951-97-4]	1000µg/mL	toluene	1	1mL
1336.12-K-T	Acenaphthylene-d8	160.25	[93951-97-4]	1000µg/mL	toluene	5	1mL
1336.12-K-T	Acenaphthylene-d8	160.25	[93951-97-4]	1000µg/mL	toluene	10	1mL
1336.12-10MG	Acenaphthylene-d8	160.25	[93951-97-4]	neat		1	10mg
1524.12-100-T	Acenaphthene-d10	164.27	[15067-26-2]	100µg/mL	toluene	1	1mL
1524.12-100-T	Acenaphthene-d10	164.27	[15067-26-2]	100µg/mL	toluene	5	1mL
1524.12-100-T	Acenaphthene-d10	164.27	[15067-26-2]	100µg/mL	toluene	10	1mL
1524.12-K-T	Acenaphthene-d10	164.27	[15067-26-2]	1000µg/mL	toluene	1	1mL
1524.12-K-T	Acenaphthene-d10	164.27	[15067-26-2]	1000µg/mL	toluene	5	1mL
1524.12-K-T	Acenaphthene-d10	164.27	[15067-26-2]	1000µg/mL	toluene	10	1mL
1524.12-10MG	Acenaphthene-d10	164.27	[15067-26-2]	neat		1	10mg
1530.13-K-IO	Fluorene-d10	176.28	[81103-79-9]	1000µg/mL	isooctane	1	1mL
1530.13-K-IO	Fluorene-d10	176.28	[81103-79-9]	1000µg/mL	isooctane	5	1mL
1530.13-K-IO	Fluorene-d10	176.28	[81103-79-9]	1000µg/mL	isooctane	10	1mL
1530.13-10MG	Fluorene-d10	176.28	[81103-79-9]	neat		1	10mg
0389.14-K-T	Phenanthrene-d10	188.30	[1517-22-2]	1000µg/mL	toluene	1	1mL
0389.14-K-T	Phenanthrene-d10	188.30	[1517-22-2]	1000µg/mL	toluene	5	1mL
0389.14-K-T	Phenanthrene-d10	188.30	[1517-22-2]	1000µg/mL	toluene	10	1mL
0389.14-10MG	Phenanthrene-d10	188.30	[1517-22-2]	neat	neat	1	10mg
0390.14-K-T	Anthracene-d10	188.30	[1719-06-8]	1000µg/mL	toluene	1	1mL
0390.14-K-T	Anthracene-d10	188.30	[1719-06-8]	1000µg/mL	toluene	5	1mL
0390.14-K-T	Anthracene-d10	188.30	[1719-06-8]	1000µg/mL	toluene	10	1mL
0390.14-10MG	Anthracene-d10	188.30	[1719-06-8]	neat		1	10mg
0391.15-K-IO	9-Methylanthracene-d12	202.31	[6406-97-9]	1000µg/mL	isooctane	1	1mL
1337.16-K-T	Fluoranthene-d10	212.32	[93951-69-0]	1000µg/mL	toluene	1	1mL
1337.16-K-T	Fluoranthene-d10	212.32	[93951-69-0]	1000µg/mL	toluene	5	1mL
1337.16-K-T	Fluoranthene-d10	212.32	[93951-69-0]	1000µg/mL	toluene	10	1mL
1337.16-10MG	Fluoranthene-d10	212.32	[93951-69-0]	neat		1	10mg
0329.16-100-T	Pyrene-d10	212.32	[1718-52-1]	100µg/mL	toluene	1	1mL
0329.16-100-T	Pyrene-d10	212.32	[1718-52-1]	100µg/mL	toluene	5	1mL
0329.16-100-T	Pyrene-d10	212.32	[1718-52-1]	100µg/mL	toluene	10	1mL
0329.16-200-T	Pyrene-d10	212.32	[1718-52-1]	200µg/mL	toluene	1	1mL
0329.16-200-T	Pyrene-d10	212.32	[1718-52-1]	200µg/mL	toluene	5	1mL
0329.16-200-T	Pyrene-d10	212.32	[1718-52-1]	200µg/mL	toluene	10	1mL
0329.16-K-T	Pyrene-d10	212.32	[1718-52-1]	1000µg/mL	toluene	1	1mL

0329.16-K-T	Pyrene-d10	212.32	[1718-52-1]	1000µg/mL	toluene	5	1mL
0329.16-K-T	Pyrene-d10	212.32	[1718-52-1]	1000µg/mL	toluene	10	1mL
0329.16-10MG	Pyrene-d10	212.32	[1718-52-1]	neat		1	10mg
0326.17-10MG	1-Methylpyrene-d9	225.34	[210487-07-3]	neat	toluene	1	10mg
0326.17-100-T	1-Methylpyrene-d9	225.34	[210487-07-3]	100µg/mL	toluene	5	1mL
1024.18-100-T	Chrysene-d12	240.37	[1719-03-5]	100µg/mL	toluene	1	1mL
1024.18-100-T	Chrysene-d12	240.37	[1719-03-5]	100µg/mL	toluene	5	1mL
1024.18-100-T	Chrysene-d12	240.37	[1719-03-5]	100µg/mL	toluene	10	1mL
1024.18-200-T	Chrysene-d12	240.37	[1719-03-5]	200µg/mL	toluene	1	1mL
1024.18-200-T	Chrysene-d12	240.37	[1719-03-5]	200µg/mL	toluene	5	1mL
1024.18-200-T	Chrysene-d12	240.37	[1719-03-5]	200µg/mL	toluene	10	1mL
1024.18-K-T	Chrysene-d12	240.37	[1719-03-5]	1000µg/mL	toluene	1	1mL
1024.18-K-T	Chrysene-d12	240.37	[1719-03-5]	1000µg/mL	toluene	5	1mL
1024.18-K-T	Chrysene-d12	240.37	[1719-03-5]	1000µg/mL	toluene	10	1mL
1024.18-2K-T	Chrysene-d12	240.37	[1719-03-5]	2000µg/mL	toluene	1	1mL
1024.18-10MG	Chrysene-d12	240.37	[1719-03-5]	neat		1	10mg
1087.18-100-T	Benz[a]anthracene-d12	240.37	[1718-53-2]	100µg/mL	toluene	1	1mL
1087.18-100-T	Benz[a]anthracene-d12	240.37	[1718-53-2]	100µg/mL	toluene	5	1mL
1087.18-100-T	Benz[a]anthracene-d12	240.37	[1718-53-2]	100µg/mL	toluene	10	1mL
1087.18-K-T	Benz[a]anthracene-d12	240.37	[1718-53-2]	1000µg/mL	toluene	1	1mL
1087.18-K-T	Benz[a]anthracene-d12	240.37	[1718-53-2]	1000µg/mL	toluene	5	1mL
1087.18-K-T	Benz[a]anthracene-d12	240.37	[1718-53-2]	1000µg/mL	toluene	10	1mL
1087.18-10MG	Benz[a]anthracene-d12	240.37	[1718-53-2]	neat		1	10mg
1538.18-K-T	Triphenylene-d12	240.37	[17777-56-9]	1000µg/mL	toluene	1	1mL
1538.18-K-T	Triphenylene-d12	240.37	[17777-56-9]	1000µg/mL	toluene	5	1mL
1088.20-100-T	Benzo[a]pyrene-d12	264.39	[63466-71-7]	100µg/mL	toluene	1	1mL
1088.20-100-T	Benzo[a]pyrene-d12	264.39	[63466-71-7]	100µg/mL	toluene	5	1mL
1088.20-100-T	Benzo[a]pyrene-d12	264.39	[63466-71-7]	100µg/mL	toluene	10	1mL
1088.20-K-T	Benzo[a]pyrene-d12	264.39	[63466-71-7]	1000µg/mL	toluene	1	1mL
1088.20-10MG	Benzo[a]pyrene-d12	264.39	[63466-71-7]	neat		1	10mg
1525.20-100-T	Benzo[e]pyrene-d12	264.39	[205440-82-0]	100µg/mL	toluene	1	1mL
1525.20-100-T	Benzo[e]pyrene-d12	264.39	[205440-82-0]	100µg/mL	toluene	5	1mL
1525.20-100-T	Benzo[e]pyrene-d12	264.39	[205440-82-0]	100µg/mL	toluene	10	1mL
1348.20-100-T	Benzo[b]fluoranthene-d12	264.39	[93951-98-5]	100µg/mL	toluene	1	1mL
1348.20-100-T	Benzo[b]fluoranthene-d12	264.39	[93951-98-5]	100µg/mL	toluene	5	1mL
1348.20-100-T	Benzo[b]fluoranthene-d12	264.39	[93951-98-5]	100µg/mL	toluene	10	1mL
1348.20-10MG	Benzo[b]fluoranthene-d12	264.39	[93951-98-5]	neat		1	10mg
1349.20-100-T	Benzo[k]fluoranthene-d12	264.39	[93952-01-3]	100µg/mL	toluene	1	1mL
1349.20-100-T	Benzo[k]fluoranthene-d12	264.39	[93952-01-3]	100µg/mL	toluene	5	1mL
1349.20-100-T	Benzo[k]fluoranthene-d12	264.39	[93952-01-3]	100µg/mL	toluene	10	1mL
1349.20-10MG	Benzo[k]fluoranthene-d12	264.39	[93952-01-3]	neat		1	10mg
1534.20-K-T	Perylene-d12	264.39	[1520-96-3]	1000µg/mL	toluene	1	1mL
1534.20-K-T	Perylene-d12	264.39	[1520-96-3]	1000µg/mL	toluene	5	1mL
1534.20-K-T	Perylene-d12	264.39	[1520-96-3]	1000µg/mL	toluene	10	1mL
1534.20-10MG	Perylene-d12	264.39	[1520-96-3]	neat		1	10mg
1089.22-100-T	Benzo[ghi]perylene-d12	288.41	[93951-66-7]	100µg/mL	toluene	1	1mL
1089.22-100-T	Benzo[ghi]perylene-d12	288.41	[93951-66-7]	100µg/mL	toluene	5	1mL
1089.22-100-T	Benzo[ghi]perylene-d12	288.41	[93951-66-7]	100µg/mL	toluene	10	1mL
1089.22-200-T	Benzo[ghi]perylene-d12	288.41	[93951-66-7]	200µg/mL	toluene	1	1mL
1089.22-200-T	Benzo[ghi]perylene-d12	288.41	[93951-66-7]	200µg/mL	toluene	5	1mL
1089.22-200-T	Benzo[ghi]perylene-d12	288.41	[93951-66-7]	200µg/mL	toluene	10	1mL
1089.22-K-T	Benzo[ghi]perylene-d12	288.41	[93951-66-7]	1000µg/mL	toluene	1	1mL
1089.22-K-T	Benzo[ghi]perylene-d12	288.41	[93951-66-7]	1000µg/mL	toluene	5	1mL
1089.22-K-T	Benzo[ghi]perylene-d12	288.41	[93951-66-7]	1000µg/mL	toluene	10	1mL
1089.22-10MG	Benzo[ghi]perylene-d12	288.41	[93951-66-7]	neat		1	10mg
0327.22-100-T	Indeno[1,2,3,-cd]fluoranthene-d12	288.41	[210487-06-2]	100µg/mL	toluene	5	1mL
1531.22-100-T	Indeno[1,2,3-cd]pyrene-d12	288.41	[203578-33-0]	100µg/mL	toluene	1	1mL
1531.22-100-T	Indeno[1,2,3-cd]pyrene-d12	288.41	[203578-33-0]	100µg/mL	toluene	5	1mL
1531.22-100-T	Indeno[1,2,3-cd]pyrene-d12	288.41	[203578-33-0]	100µg/mL	toluene	10	1mL
1531.22-K-T	Indeno[1,2,3-cd]pyrene-d12	288.41	[203578-33-0]	1000µg/mL	toluene	1	1mL
1531.22-K-T	Indeno[1,2,3-cd]pyrene-d12	288.41	[203578-33-0]	1000µg/mL	toluene	5	1mL
1531.22-K-T	Indeno[1,2,3-cd]pyrene-d12	288.41	[203578-33-0]	1000µg/mL	toluene	10	1mL
1531.22-10MG	Indeno[1,2,3-cd]pyrene-d12	288.41	[203578-33-0]	neat		1	10mg

1330.22-100-IO	Dibenz[a,h]anthracene-d14	292.44	[13250-98-1]	100µg/mL	isooctane	1	1mL
1330.22-100-IO	Dibenz[a,h]anthracene-d14	292.44	[13250-98-1]	100µg/mL	isooctane	5	1mL
1330.22-100-IO	Dibenz[a,h]anthracene-d14	292.44	[13250-98-1]	100µg/mL	isooctane	10	1mL
1330.22-100-T	Dibenz[a,h]anthracene-d14	292.44	[13250-98-1]	100µg/mL	toluene	1	1mL
1330.22-100-T	Dibenz[a,h]anthracene-d14	292.44	[13250-98-1]	100µg/mL	toluene	5	1mL
1330.22-100-T	Dibenz[a,h]anthracene-d14	292.44	[13250-98-1]	100µg/mL	toluene	10	1mL
1330.22-200-T	Dibenz[a,h]anthracene-d14	292.44	[13250-98-1]	200µg/mL	toluene	1	1mL
1330.22-200-T	Dibenz[a,h]anthracene-d14	292.44	[13250-98-1]	200µg/mL	toluene	5	1mL
1330.22-200-T	Dibenz[a,h]anthracene-d14	292.44	[13250-98-1]	200µg/mL	toluene	10	1mL
1330.22-10MG	Dibenz[a,h]anthracene-d14	292.44	[13250-98-1]	neat		1	10mg
1526.24-100-T	Coronene-d12	312.44	[16083-32-2]	100µg/mL	toluene	1	1mL
1526.24-100-T	Coronene-d12	312.44	[16083-32-2]	100µg/mL	toluene	5	1mL
1526.24-100-T	Coronene-d12	312.44	[16083-32-2]	100µg/mL	toluene	10	1mL
1526.24-K-T	Coronene-d12	312.44	[16083-32-2]	1000µg/mL	toluene	1	1mL
1526.24-K-T	Coronene-d12	312.44	[16083-32-2]	1000µg/mL	toluene	5	1mL
1526.24-K-T	Coronene-d12	312.44	[16083-32-2]	1000µg/mL	toluene	10	1mL
1529.24-100-T	Dibenzo[a,i]pyrene-d14	316.46	[158776-07-9]	100µg/mL	toluene	1	1mL
1529.24-100-T	Dibenzo[a,i]pyrene-d14	316.46	[158776-07-9]	100µg/mL	toluene	5	1mL
1529.24-100-T	Dibenzo[a,i]pyrene-d14	316.46	[158776-07-9]	100µg/mL	toluene	10	1mL
1529.24-K-T	Dibenzo[a,i]pyrene-d14	316.46	[158776-07-9]	1000µg/mL	toluene	1	1mL
1529.24-10MG	Dibenzo[a,i]pyrene-d14	316.46	[158776-07-9]	neat		1	10mg
1086.12-K-T	Biphenyl-d10	164.27	[1486-01-7]	1000µg/mL	toluene	1	1mL
1086.12-10MG	Biphenyl-d10	164.27	[1486-01-7]	neat		1	10mg
1535.18-100-T	o-Terphenyl-d14	244.40	[5142-76-6]	100µg/mL	toluene	1	1mL
1535.18-100-T	o-Terphenyl-d14	244.40	[5142-76-6]	100µg/mL	toluene	5	1mL
1535.18-100-T	o-Terphenyl-d14	244.40	[5142-76-6]	100µg/mL	toluene	10	1mL
1535.18-K-T	o-Terphenyl-d14	244.40	[5142-76-6]	1000µg/mL	toluene	1	1mL
1535.18-K-T	o-Terphenyl-d14	244.40	[5142-76-6]	1000µg/mL	toluene	5	1mL
1535.18-K-T	o-Terphenyl-d14	244.40	[5142-76-6]	1000µg/mL	toluene	10	1mL
1536.18-100-T	m-Terphenyl-d14	244.40	[17714-84-0]	100µg/mL	toluene	1	1mL
1536.18-100-T	m-Terphenyl-d14	244.40	[17714-84-0]	100µg/mL	toluene	5	1mL
1536.18-100-T	m-Terphenyl-d14	244.40	[17714-84-0]	100µg/mL	toluene	10	1mL
1536.18-K-T	m-Terphenyl-d14	244.40	[17714-84-0]	1000µg/mL	toluene	1	1mL
1536.18-K-T	m-Terphenyl-d14	244.40	[17714-84-0]	1000µg/mL	toluene	5	1mL
1536.18-K-T	m-Terphenyl-d14	244.40	[17714-84-0]	1000µg/mL	toluene	10	1mL
1537.18-100-T	p-Terphenyl-d14	244.40	[1718-51-0]	100µg/mL	toluene	1	1mL
1537.18-100-T	p-Terphenyl-d14	244.40	[1718-51-0]	100µg/mL	toluene	5	1mL
1537.18-100-T	p-Terphenyl-d14	244.40	[1718-51-0]	100µg/mL	toluene	10	1mL
1537.18-K-T	p-Terphenyl-d14	244.40	[1718-51-0]	1000µg/mL	toluene	1	1mL
1537.18-K-T	p-Terphenyl-d14	244.40	[1718-51-0]	1000µg/mL	toluene	5	1mL
1537.18-K-T	p-Terphenyl-d14	244.40	[1718-51-0]	1000µg/mL	toluene	10	1mL
0328.20-100-T	2,2'-Binaphthyl-d14	268.42	[210487-05-1]	100µg/mL	toluene	5	1mL

Deuterated PANHs

0386.12-K-T	Carbazole-d8	175.26	[97960-57-1]	1000µg/mL	toluene	1	1mL
0386.12-K-T	Carbazole-d8	175.26	[97960-57-1]	1000µg/mL	toluene	5	1mL
0386.12-K-T	Carbazole-d8	175.26	[97960-57-1]	1000µg/mL	toluene	10	1mL
0385.13-K-T	Acridine-d9	188.28	[34749-75-2]	1000µg/mL	toluene	1	1mL

Deuterated PAOHs, dioxins and PASHs

1527.12-100-IO	Dibenzo-p-dioxin-d8	192.24	[69699-83-8]	100µg/mL	isooctane	1	1mL
1528.12-100-IO	Dibenzofuran-d8	176.25	[93952-04-6]	100µg/mL	isooctane	1	1mL
1068.4-100MG	Thiophene-d4	88.16	[2036-39-7]	neat		1	100mg
0383.12-K-IO	Dibenzothiophene-d8	192.31	[33262-29-2]	1000µg/mL	isooctane	1	1mL
0383.12-K-IO	Dibenzothiophene-d8	192.31	[33262-29-2]	1000µg/mL	isooctane	5	1mL
0383.12-10MG	Dibenzothiophene-d8	192.31	[33262-29-2]	neat		1	10mg

Deuterated hydroxyPAHs

1490.16-10MG	1-Hydroxypyrene-d9	227.31	[132603-37-3]	neat		1	10mg

Deuterated nitroPAHs

2216.10-K-T	1-Nitronaphthalene-d7	180.22	[80789-77-1]	1000µg/mL	toluene	1	1mL
2216.10-K-T	1-Nitronaphthalene-d7	180.22	[80789-77-1]	1000µg/mL	toluene	5	1mL
2216.10-K-T	1-Nitronaphthalene-d7	180.22	[80789-77-1]	1000µg/mL	toluene	10	1mL
2216.10-10MG	1-Nitronaphthalene-d7	180.22	[80789-77-1]	neat		1	10mg
1109.13-100-T	2-Nitrofluorene-d9	220.28	[128008-87-7]	100µg/mL	toluene	1	1mL
1109.13-100-T	2-Nitrofluorene-d9	220.28	[128008-87-7]	100µg/mL	toluene	5	1mL
1109.13-100-T	2-Nitrofluorene-d9	220.28	[128008-87-7]	100µg/mL	toluene	10	1mL
1109.13-K-T	2-Nitrofluorene-d9	220.28	[128008-87-7]	1000µg/mL	toluene	1	1mL
1107.14-100-T	9-Nitroanthracene-d9	232.29	[220381-38-4]	100µg/mL	toluene	1	1mL
1107.14-100-T	9-Nitroanthracene-d9	232.29	[220381-38-4]	100µg/mL	toluene	5	1mL
1107.14-100-T	9-Nitroanthracene-d9	232.29	[220381-38-4]	100µg/mL	toluene	10	1mL
1107.14-K-T	9-Nitroanthracene-d9	232.29	[220381-38-4]	1000µg/mL	toluene	1	1mL
2217.16-100-IO	1-Nitropyrene-d9	256.31	[93487-20-8]	100µg/mL	isooctane	1	1mL
2217.16-100-T	1-Nitropyrene-d9	256.31	[93487-20-8]	100µg/mL	toluene	1	1mL
2217.16-100-T	1-Nitropyrene-d9	256.31	[93487-20-8]	100µg/mL	toluene	5	1mL
2217.16-100-T	1-Nitropyrene-d9	256.31	[93487-20-8]	100µg/mL	toluene	10	1mL
1116.16-100-T	3-Nitrofluoranthene-d9	256.31	[350820-11-0]	100µg/mL	toluene	1	1mL
1116.16-100-T	3-Nitrofluoranthene-d9	256.31	[350820-11-0]	100µg/mL	toluene	5	1mL
1116.16-100-T	3-Nitrofluoranthene-d9	256.31	[350820-11-0]	100µg/mL	toluene	10	1mL
1116.16-K-T	3-Nitrofluoranthene-d9	256.31	[350820-11-0]	1000µg/mL	toluene	1	1mL
1115.18-100-T	6-Nitrochrysene-d11	284.36	[203805-92-9]	100µg/mL	toluene	1	1mL
1115.18-100-T	6-Nitrochrysene-d11	284.36	[203805-92-9]	100µg/mL	toluene	5	1mL
1115.18-100-T	6-Nitrochrysene-d11	284.36	[203805-92-9]	100µg/mL	toluene	10	1mL
1115.18-K-T	6-Nitrochrysene-d11	284.36	[203805-92-9]	1000µg/mL	toluene	1	1mL
1112.20-100-T	6-Nitrobenzo[a]pyrene-d11	308.38	[352431-12-0]	100µg/mL	toluene	1	1mL
1112.20-100-T	6-Nitrobenzo[a]pyrene-d11	308.38	[352431-12-0]	100µg/mL	toluene	5	1mL
1112.20-100-T	6-Nitrobenzo[a]pyrene-d11	308.38	[352431-12-0]	100µg/mL	toluene	10	1mL

Deuterated aminoPAHs

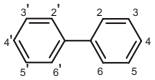
2215.10-K-T	1-Aminonaphthalene-d7	150.23		1000µg/mL	toluene	1	1mL
2215.10-K-T	1-Aminonaphthalene-d7	150.23		1000µg/mL	toluene	5	1mL
2215.10-K-T	1-Aminonaphthalene-d7	150.23		1000µg/mL	toluene	10	1mL
1542.10-K-IO	2-Aminonaphthalene-d7	150.23	[93951-94-1]	1000µg/mL	isooctane	1	1mL
1542.10-K-IO	2-Aminonaphthalene-d7	150.23	[93951-94-1]	1000µg/mL	isooctane	5	1mL
1542.10-K-IO	2-Aminonaphthalene-d7	150.23	[93951-94-1]	1000µg/mL	isooctane	10	1mL
1539.12-K-T	2-Aminobiphenyl-d9	178.28	[344298-97-1]	1000µg/mL	toluene	5	1mL
1539.12-K-T	2-Aminobiphenyl-d9	178.28	[344298-97-1]	1000µg/mL	toluene	10	1mL
1540.12-K-T	4-Aminobiphenyl-d9	178.28	[344298-96-0]	1000µg/mL	toluene	5	1mL
1540.12-K-T	4-Aminobiphenyl-d9	178.28	[344298-96-0]	1000µg/mL	toluene	10	1mL
1541.13-K-T	2-Aminofluorene-d11	192.31	[34741-44-5]	1000µg/mL	toluene	5	1mL
1541.13-K-T	2-Aminofluorene-d11	192.31	[34741-44-5]	1000µg/mL	toluene	10	1mL

EPA/EU PAH Kits (see also the application sections, PAHs)

1708.16-K-IO	Single 16 EPA-PAH Kit, isooctane-1000µg/mL	[324-74-3]	1000µg/mL	isooctane	1	Kit
1708.16-K-T	Single 16 EPA-PAH Kit, toluene-1000µg/mL	[324-74-3]	1000µg/mL	toluene	1	Kit
1708.16-KIT-IO	Single 16 EPA-PAH Kit, isooctane-mix conc.		Mix 200 and 1000µg/mL	isooctane		Kit
1708.16-KIT-T	Single 16 EPA-PAH Kit, toluene-mix conc.		Mix 200 and 1000µg/mL	toluene		Kit
1959.16-KIT-N	Single 16 EPA-PAH Kit Neat, 10mg		neat			Kit
S-4063-100-T	EPA-PAHs, Cocktail 1		100µg/mL	toluene		5 mL
S-4064-10-CY	EPA-PAHs, Cocktail 2		10µg/mL	cyclohexane		5 mL
S-4065-10-AN	EPA-PAHs, Cocktail 3		10µg/mL	acetonitrile		5 mL
S-4513-100-T	Deuterated 16 EPA PAH-mix		100µg/mL	toluene		1 mL
S-4514-100-T	Deuterated 15 EU PAH-mix		100µg/mL	toluene		1 mL
S-4062-ASS-5AN	WHO Mix		assorted	acetonitrile		5 mL
S-4452-100-5T	15 EU PAH Cocktail		100µg/mL	toluene		5 mL
3958.15-KIT	Single 15 EU PAH Kit					Kit

Biphenyls and terphenyls

Biphenyl and alkylbiphenyls

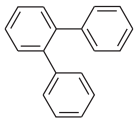


0341.12-K-IO	Biphenyl	154.21	[92-52-4]	1000µg/mL	isooctane	1	1mL
0430.13-K-IO	2-Methylbiphenyl	168.24	[643-58-3]	1000µg/mL	isooctane	1	1mL
0431.13-K-IO	3-Methylbiphenyl	168.24	[643-93-6]	1000µg/mL	isooctane	1	1mL
0432.13-K-IO	4-Methylbiphenyl	168.24	[644-08-6]	1000µg/mL	isooctane	1	1mL
0433.14-K-IO	2,2'-Dimethylbiphenyl	182.27	[605-39-0]	1000µg/mL	isooctane	1	1mL
0434.14-K-IO	3,3'-Dimethylbiphenyl	182.27	[612-39-0]	1000µg/mL	isooctane	1	1mL
0435.14-K-IO	4,4'-Dimethylbiphenyl	182.27	[613-33-2]	1000µg/mL	isooctane	1	1mL
0436.14-K-IO	4-Ethylbiphenyl	182.27	[5707-44-8]	1000µg/mL	isooctane	1	1mL
0342.15-K-IO	4-n-Propylbiphenyl	196.29	[10298-45-9]	1000µg/mL	isooctane	1	1mL
0138.16-K-IO	2,2',5,5'-Tetramethylbiphenyl	210.32	[3075-84-1]	1000µg/mL	isooctane	1	1mL
0139.16-K-IO	3,3',4,4'-Tetramethylbiphenyl	210.32	[4920-95-0]	1000µg/mL	isooctane	1	1mL
0140.16-K-IO	3,3',5,5'-Tetramethylbiphenyl	210.32	[25570-02-9]	1000µg/mL	isooctane	1	1mL
0343.16-K-IO	4-n-Butylbiphenyl	210.32	[37909-95-8]	1000µg/mL	isooctane	1	1mL
0141.17-K-IO	4-n-Pentylbiphenyl	224.35	[7116-96-3]	1000µg/mL	isooctane	1	1mL
0344.18-K-IO	4-n-Hexylbiphenyl	238.38	[59662-31-6]	1000µg/mL	isooctane	1	1mL
0345.19-K-IO	4-n-Heptylbiphenyl	252.40	[59662-32-7]	1000µg/mL	isooctane	1	1mL
1610.20-K-IO	4-n-Octylbiphenyl	266.43	[7116-97-4]	1000µg/mL	isooctane	1	1mL
0346.21-K-IO	4-n-Nonylbiphenyl	280.46	[93972-01-1]	1000µg/mL	isooctane	1	1mL
0429.18-KIT	Alkylbiphenyl Kit						Kit

Terphenyls

0348.18 **o-Terphenyl**

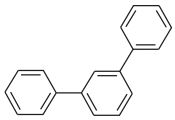
[84-15-1] MW 230.31



0348.18-K-IO	1000µg/mL isooctane, 1x1mL
0348.18-10MG	neat, 1x10mg

0142.18 **m-Terphenyl**

[92-06-8] MW 230.31



0142.18-K-T	1000µg/mL toluene, 1x1mL

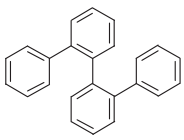
0347.18 **p-Terphenyl**

[92-94-4] MW 230.31

0347.18-K-T	1000µg/mL toluene, 1x1mL

2570.24 **o-Quarterphenyl**

[641-96-3] MW 306.41



2570.24-K-IO	1000µg/mL isooctane, 1x1mL
2570.24-5MG	neat, 1x5mg

2571.24 **m-Quarterphenyl**

[1166-18-3] MW 306.41

2571.24-K-IO	1000µg/mL isooctane, 1x1mL
2571.24-5MG	neat, 1x5mg

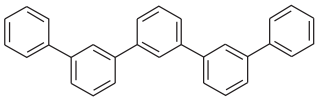
1801.24 **p-Quaterphenyl**

[135-70-6] MW 306.41

1801.24-K-T	1000µg/mL toluene, 1x1mL

2586.30 **m-Quinquiphenyl**

[16716-13-5] MW 382.51



2586.30-K-IO	1000µg/mL isooctane, 1x1mL
2586.30-5MG	neat, 1x5mg

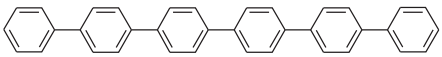
1802.30 **p-Quinquiphenyl**

[3073-05-0] MW 382.51

1802.30-K-T	1000µg/mL toluene, 1x1mL

1803.36 **p-Sexiphenyl**

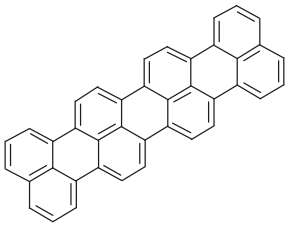
[4499-83-6] MW 458.61



1803.36-K-T	1000µg/mL toluene, 1x1mL

0026.40 **Quaterrylene**

[188-73-8] MW 500.61



0026.40-2MG	neat, 1x2mg
0026.40-100-T	100µg/mL toluene, 1x1mL

0004.10 **Terphenyl Kit**

0004.10-KIT	Kit

Hydroxy biphenyls

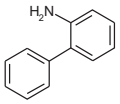
1600.12-10MG	4,4'-Dihydroxybiphenyl	186.21	[92-88-6]	neat		1	10mg

Nitrobiphenyls and terphenyl

1485.12-100-T	2-Nitrobiphenyl	199.21	[86-00-0]	100µg/mL	toluene	1	1mL
1485.12-10MG	2-Nitrobiphenyl	199.21	[86-00-0]	neat		1	10mg
1340.12-100-T	4-Nitrobiphenyl	199.21	[92-93-3]	100µg/mL	toluene	1	1mL
1340.12-10MG	4-Nitrobiphenyl	199.21	[92-93-3]	neat		1	10mg
1208.12-100-T	2,2'-Dinitrobiphenyl	244.21	[2436-96-6]	100µg/mL	toluene	1	1mL
1208.12-10MG	2,2'-Dinitrobiphenyl	244.21	[2436-96-6]	neat		1	10mg
1738.12-100-T	4,4'-Dinitrobiphenyl	244.21	[1528-74-1]	100µg/mL	toluene	1	1mL
1739.12-K-T	3,3'-Dinitrobenzidine	274.24	[6271-79-0]	1000µg/mL	toluene	1	1mL
1114.18-100-T	4,4''-Dinitro-p-terphenyl	320.31	[3282-11-9]	100µg/mL	toluene	1	1mL
1114.18-10MG	4,4''-Dinitro-p-terphenyl	320.31	[3282-11-9]	neat		1	10mg
3667.6-KIT	Nitrobiphenyl (Solutions) Kit						Kit

Aminobiphenyls

2696.12 **2-Aminobiphenyl**
[90-41-5] MW 169.23



2696.12-K-IO 1000µg/mL isooctane, 1x1mL

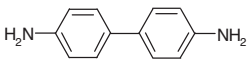
1804.12 **3-Aminobiphenyl**
[2243-47-2] MW 169.23

1804.12-10MG neat, 1x10mg

2783.12 **4-Aminobiphenyl**
[92-67-1] MW 169.23

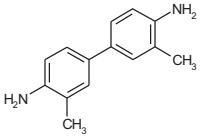
2783.12-100-IO 100µg/mL isooctane, 1x1mL

1773.12 **4,4′-Diaminobiphenyl**
Benzidine
[92-87-5] MW 184.24



1773.12-K-IO 1000µg/mL isooctane,1x1mL

2786.14 **3,3′-Dimethylbenzidine**
[119-93-7] MW 212.30



2786.14-100-IO 100µg/mL isooctane, 1x1mL

1815.12 **3,3′-Diaminobenzidine**
[91-95-2] MW 214.27

1815.12-K-IO 1000µg/mL isooctane, 1x1mL

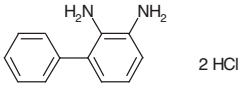
2761.14 **3,3′-Dimethoxybenzidine**
[119-90-4] MW 244.30

2761.14-1ML neat, 1x1mL

2785.12 **3,3′-Dichlorobenzidine**
[91-94-1] MW 253.13

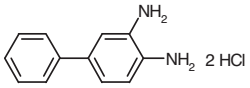
2785.12-100-IO 100µg/mL isooctane, 1x1mL

F-7008 **2,3-Diaminobiphenyl 2HCl**
[101-77-9] MW 184.24



F-7008-100MG neat, 1x100mg

F-7009 **3,4-Diaminobiphenyl 2HCl**
[471238-97-8] MW 184.24

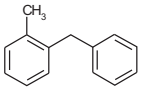


F-7009-100MG neat, 1x100mg

Diphenyl methanes, Bibenzyls

1615.14 **2-Methyldiphenylmethane**

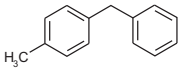
[713-36-0] MW 182.27



1615.14-10MG neat, 1x10mg

1616.14 **4-Methyldiphenylmethane**

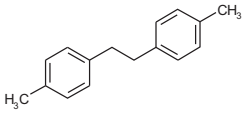
[620-83-7] MW 182.27



1616.14-10MG neat, 1x10mg

2721.16 **4,4'-Dimethylbibenzyl**

[538-39-6] MW210.32

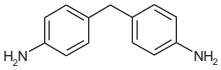


2721.16-K-IO 1000μg/mL isooctane, 1x1mL

Aminodiphenylmethanes

2762.13 **4,4'-Methylenedianiline**

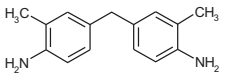
[101-77-9] MW 198.27



2762.13-1ML neat, 1x1mL

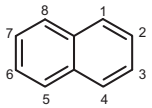
2787.15 **3,3'-Dimethyl-4,4'-diaminodiphenylmethane**

[838-88-0] MW 226.32



2787.15-100-IO 100μg/mL isooctane, 1x1mL

Naphthalenes



C0-C1 Naphthalenes

0711.10-K-IO	Naphthalene		128.18	[91-20-3]	1000μg/mL	isooctane	1	1mL
0711.10-10MG	Naphthalene		128.18	[91-20-3]	neat		1	10mg
0712.11-K-IO	1-Methylnaphthalene	1-MN	142.20	[90-12-0]	1000μg/mL	isooctane	1	1mL
0712.11-10MG	1-Methylnaphthalene	1-MN	142.20	[90-12-0]	neat		1	10mg
0713.11-K-IO	2-Methylnaphthalene	2-MN	142.20	[91-57-6]	1000μg/mL	isooctane	1	1mL
0713.11-10MG	2-Methylnaphthalene	2-MN	142.20	[91-57-6]	neat		1	10mg
3618.3-KIT	C0-C1 Naphthalene Kit							Kit

C2 Naphthalenes

0721.12-K-IO	1,2-Dimethylnaphthalene	1,2-DMN	156.23	[573-98-8]	1000μg/mL	isooctane	1	1mL
0722.12-K-IO	1,3-Dimethylnaphthalene	1,3-DMN	156.23	[575-41-7]	1000μg/mL	isooctane	1	1mL
0723.12-K-IO	1,4-Dimethylnaphthalene	1,4-DMN	156.23	[571-58-4]	1000μg/mL	isooctane	1	1mL

0724.12-K-IO	1,5-Dimethylnaphthalene	1,5-DMN	156.23	[571-61-9]	1000µg/mL	isooctane	1	1mL
0725.12-K-IO	1,6-Dimethylnaphthalene	1,6-DMN	156.23	[575-43-9]	1000µg/mL	isooctane	1	1mL
0726.12-K-IO	1,7-Dimethylnaphthalene	1,7-DMN	156.23	[575-37-1]	1000µg/mL	isooctane	1	1mL
0727.12-K-IO	1,8-Dimethylnaphthalene	1,8-DMN	156.23	[569-41-5]	1000µg/mL	isooctane	1	1mL
0728.12-K-IO	2,3-Dimethylnaphthalene	2,3-DMN	156.23	[581-40-8]	1000µg/mL	isooctane	1	1mL
0729.12-K-IO	2,6-Dimethylnaphthalene	2,6-DMN	156.23	[581-42-0]	1000µg/mL	isooctane	1	1mL
0731.12-K-IO	2,7-Dimethylnaphthalene	2,7-DMN	156.23	[582-16-1]	1000µg/mL	isooctane	1	1mL
0714.12-K-IO	1-Ethylnaphthalene	1-EN	156.23	[1127-76-0]	1000µg/mL	isooctane	1	1mL
0715.12-K-IO	2-Ethylnaphthalene	2-EN	156.23	[939-27-5]	1000µg/mL	isooctane	1	1mL
0730.12-KIT	C2 Naphthalene Kit							Kit

C3 Naphthalene

0700.13-500-IO	1,2,3-Trimethylnaphthalene	1,2,3-TMN	170.26	[879-12-9]	500µg/mL	isooctane	1	1mL
0701.13-500-IO	1,2,4-Trimethylnaphthalene	1,2,4-TMN	170.26	[2717-42-2]	500µg/mL	isooctane	1	1mL
0702.13-500-IO	1,2,5-Trimethylnaphthalene	1,2,5-TMN	170.26	[641-91-8]	500µg/mL	isooctane	1	1mL
0703.13-500-IO	1,2,6-Trimethylnaphthalene	1,2,6-TMN	170.26	[3031-05-8]	500µg/mL	isooctane	1	1mL
0170.13-500-IO	1,3,7-Trimethylnaphthalene	1,3,7-TMN	170.26	[2131-38-6]	500µg/mL	isooctane	1	1mL
0704.13-500-IO	1,4,5-Trimethylnaphthalene	1,4,5-TMN	170.26	[2131-41-1]	500µg/mL	isooctane	1	1mL
0705.13-500-IO	1,4,6-Trimethylnaphthalene	1,4,6-TMN	170.26	[2131-42-2]	500µg/mL	isooctane	1	1mL
0706.13-500-IO	2,3,5-Trimethylnaphthalene	2,3,5-TMN	170.26	[2245-38-7]	500µg/mL	isooctane	1	1mL
0441.13-500-IO	2,3,6-Trimethylnaphthalene	2,3,6-TMN	170.26	[829-26-5]	500µg/mL	isooctane	1	1mL
1030.13-500-IO	2,4,5-Trimethylnaphthalene	2,4,5-TMN	170.26	[17057-91-9]	500µg/mL	isooctane	1	1mL
2737.13-K-IO	1-n-Propylnaphthalene		170.26	[2765-18-6]	1000µg/mL	isooctane	1	1mL
1720.13-K-IO	2-n-Propylnaphthalene		170.26	[2027-19-2]	1000µg/mL	isooctane	1	1mL
2729.13-K-IO	1-Isopropylnaphthalene		170.26	[6158-45-8]	1000µg/mL	isooctane	1	1mL
0716.13-K-IO	2-Isopropylnaphthalene		170.26	[2027-17-0]	1000µg/mL	isooctane	1	1mL
2736.13-K-IO	2-Ethyl-6-methylnaphthalene		170.26	[7372-86-3]	1000µg/mL	isooctane	1	1mL
2480.13-K-IO	1,2-Dihydro-3,5,8-trimethylnaphthalene		172.27	[30316-18-8]	1000µg/mL	isooctane	1	1mL
3545.16-KIT	C3 Naphthalene Kit							Kit

C4+ Naphthalenes

0167.14-500-IO	1,2,5,6-Tetramethylnaphthalene	1,2,5,6-TeMN	184.28	[2131-43-3]	500µg/mL	isooctane	1	1mL
0707.14-500-IO	1,4,6,7-Tetramethylnaphthalene	1,4,6,7-TeMN	184.28	[13764-18-6]	500µg/mL	isooctane	1	1mL
0737.14-500-IO	7-Isopropyl-1-methylnaphtalene	Eudalene	184.28	[490-65-3]	500µg/mL	isooctane	1	1mL
1261.14-K-IO	2-Butylnaphthalene		184.28	[1134-62-9]	1000µg/mL	isooctane	1	1mL
0733.15-500-IO	4-Isopropyl-1,6-dimethylnaphtalene	Cadalene	198.31	[483-78-3]	500µg/mL	isooctane	1	1mL
0736.15-500-IO	1,4-Dimethyl-5-propylnaphthalene		198.31	[204256-08-6]	500µg/mL	isooctane	1	1mL
1126.16-K-IO	2,6-Diisopropylnaphthalene		212.34	[24157-81-1]	1000µg/mL	isooctane	1	1mL
1402.16-K-IO	6-Butyl-2,3-dimethylnaphthalene		212.34	[95-48-7]	1000µg/mL	isooctane	1	1mL
2792.16-K-IO	1-n-Hexylnaphthalene		212.34	[2876-53-1]	1000µg/mL	isooctane	1	1mL
0735.18-500-IO	2,3-Dimethyl-5-(4-methylpentyl)naphthalene		240.39	[204256-07-5]	500µg/mL	isooctane	1	1mL
1718.18-K-IO	2,7-Di-tert-butylnaphthalene		240.39	[10275-58-8]	1000µg/mL	isooctane	1	1mL
1717.22-K-IO	1-n-Dodecylnaphthalene		296.50	[38641-16-6]	1000µg/mL	isooctane	1	1mL
0740.12-KIT	C4+ Naphthalene Kit							Kit
0710.12-KIT	Tri- and Tetramethylnaphthalene Kit							Kit
0720.12-KIT	Naphthalene and Monosubstituted Naphthalene Kit							Kit

Phenylnaphthyls/binaphthyls

0349.16-K-IO	1-Phenylnaphthalene	204.27	[605-02-7]	1000µg/mL	isooctane	1	1mL
1956.16-K-IO	2-Phenylnaphthalene	204.27	[612-94-2]	1000µg/mL	Isooctane	1	1mL
0252.20-K-IO	1,1'-Binaphthyl	254.33	[604-53-5]	1000µg/mL	isooctane	1	1mL
3814.20-200-IO	1,2'-Binaphthyl	254.33	[4325-74-0]	200µg/mL	isooctane	1	1mL
0254.20-200-IO	2,2'-Binaphthyl	254.33	[612-78-2]	200µg/mL	isooctane	1	1mL
0396.5-KIT	Phenylnaphthyl/Binaphthyl Kit						Kit

Naphthols NEW

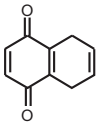
2376.10-K-IP	1-Naphthol	144.17	[90-15-3]	1000µg/mL	isopropanol	1	1mL
2377.10-K-IP	2-Naphthol	144.17	[135-19-3]	1000µg/mL	isopropanol	1	1mL

1597.10-10MG	2,3-Dihydroxynaphthalene	160.17	[92-44-4]	neat		1	10mg
1924.10-10MG	trans-1,2-Dihydroxy-1,2-dihydronaphthalene	162.19	[612-94-2]	neat		1	10mg
2817.11-100-IO	1-Methyl-2-naphthol	158.20	[1076-26-2]	100µg/mL	isooctane	1	1mL
3670.11-100-IO	2-Methyl-1-naphthol	158.20	[7469-77-4]	100µg/mL	isooctane	1	1mL
2808.11-100-IO	3-Methyl-1-naphthol	158.20	[13615-40-2]	100µg/mL	isooctane	1	1mL
2815.11-100-IO	3-Methyl-2-naphthol	158.20	[17324-04-8	100µg/mL	isooctane	1	1mL
2805.11-100-IO	4-Methyl-1-naphthol	158.20	[10240-08-1]	100µg/mL	isooctane	1	1mL
3073.11-100-IO	4-Methyl-2-naphthol	158.20	[26207-06-7	100µg/mL	isooctane	1	1mL
3071.11-100-IO	5-Methyl-1-naphthol	158.20	[51149-87-2]	100µg/mL	isooctane	1	1mL
3074.11-100-IO	5-Methyl-2-naphthol	158.20	[66256-29-9	100µg/mL	isooctane	1	1mL
3072.11-100-IO	6-Methyl-1-naphthol	158.20	[24894-78-8]	100µg/mL	isooctane	1	1mL
2755.11-100-IO	6-Methyl-2-naphthol	158.20	[17579-79-2	100µg/mL	isooctane	1	1mL
2816.11-100-IO	7-Methyl-1-naphthol	158.20	[6939-33-9]	100µg/mL	isooctane	1	1mL
2766.11-100-IO	7-Methyl-2-naphthol	158.20	[26593-50-0]	100µg/mL	isooctane	1	1mL
2794.11-100-IO	8-Methyl-1-naphthol	158.20	[32849-41-5]	100µg/mL	isooctane	1	1mL
2809.11-100-IO	8-Methyl-2-naphthol	158.20	[19393-87-4]	100µg/mL	isooctane	1	1mL
3669.14-KIT	Methylnaphthol Kit						Kit
3075.18-KIT	Naphthol Kit						Kit
1346.10	cis-4-(2-Hydroxyphenyl)-2-oxobut-3-enoic acid (Naphthalene metabolite)	192.17	[31966-72-0]	Please inquire			

Ketonaphthalenes

3475.10 **5,8-Dihydro-1,4-naphthoquinone**

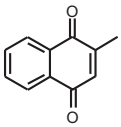
[6295-28-9] MW 160.17



3475.10-10MG neat, 1x10mg

3546.11 **2-Methyl-1,4-naphthoquinone**

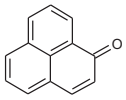
[58-27-5] MW 172.18



3546.11-10MG neat, 1x10mg

0010.13 **Perinaphthenone**

[548-39-0] MW 180.21

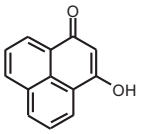


0010.13-200-T 200µg/mL toluene, 1x1mL

0010.13-10MG neat, 1x10mg

3495.13 **3-Hydroxy-1H-phenalen-1-one**

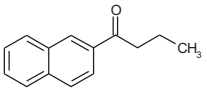
[5472-84-4] MW 196.20



3495.13-10MG neat, 1x10mg

1401.14 **1-(2-Naphthyl)-butanone**

[17666-88-5] MW 198.27



1401.14-K-IO 1000µg/mL isooctane, 1x1mL

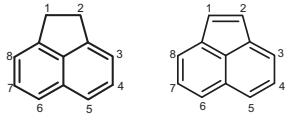
Nitronaphthalenes

0007.10-100-T	1-Nitronaphthalene	173.17	[86-57-7]	100µg/mL	toluene	1	1mL
0007.10-10MG	1-Nitronaphthalene	173.17	[86-57-7]	neat		1	10mg
0008.10-100-T	2-Nitronaphthalene	173.17	[581-89-5]	100µg/mL	toluene	1	1mL
0008.10-10MG	2-Nitronaphthalene	173.17	[581-89-5]	neat		1	10mg
2195.11-100-ME	1-Methyl-4-nitronaphthalene	187.20	[880-93-9]	100µg/mL	methanol	1	1mL
2195.11-K-ME	1-Methyl-4-nitronaphthalene	187.20	[880-93-9]	1000µg/mL	methanol	1	1mL
2196.11-100-ME	1-Methyl-5-nitronaphthalene	187.20	[91137-27-8]	100µg/mL	methanol	1	1mL
2196.11-K-ME	1-Methyl-5-nitronaphthalene	187.20	[91137-27-8]	1000µg/mL	methanol	1	1mL
2197.11-100-ME	1-Methyl-6-nitronaphthalene	187.20	[105752-67-8]	100µg/mL	methanol	1	1mL
2197.11-K-ME	1-Methyl-6-nitronaphthalene	187.20	[105752-67-8]	1000µg/mL	methanol	1	1mL
2199.11-100-ME	2-Methyl-1-nitronaphthalene	187.20	[881-03-8]	100µg/mL	methanol	1	1mL
2199.11-K-ME	2-Methyl-1-nitronaphthalene	187.20	[881-03-8]	1000µg/mL	methanol	1	1mL
2198.11-100-ME	2-Methyl-4-nitronaphthalene	187.20	[13615-38-8]	100µg/mL	methanol	1	1mL
2198.11-K-ME	2-Methyl-4-nitronaphthalene	187.20	[13615-38-8]	1000µg/mL	methanol	1	1mL
1105.10-100-T	1,5-Dinitronaphthalene	218.17	[605-71-0]	100µg/mL	toluene	1	1mL
1458.10-10MG	2,4-Dinitro-1-naphthol	234.17	[605-69-6]	neat		1	10mg
1449.9 -KIT	Nitronaphthalene Kit						Kit

Aminonaphthalenes

1779.10-10MG	1-Aminonaphthalene	143.19	[134-32-7]	neat		1	10mg
1780.10-10MG	2-Aminonaphthalene	143.19	[91-59-8]	neat		1	10mg
1774.11-10MG	1-Amino-2-methylnaphthalene	157.22	[2246-44-8]	neat		1	10mg
1781.10-10MG	1,5-Diaminonaphthalene	158.20	[2243-62-1]	neat		1	10mg
1782.10-10MG	1,8-Diaminonaphthalene	158.20	[479-27-6]	neat		1	10mg
1783.10-10MG	2,3-Diaminonaphthalene	158.20	[771-97-1]	neat		1	10mg
1759.10-10MG	5-Amino-1-naphthol	159.19	[83-55-6]	neat		1	10mg
1760.10-10MG	8-Amino-2-naphthol	159.19	[118-46-7]	neat		1	10mg
1906.8-KIT	Aminonaphthalene Kit						Kit
	Chloronaphthalenes: See the PCNs in the POP section, page 361.						
	Bromonaphthalenes: See the PBNs in the POP section, page 361.						

Acenaphthenes and acenaphthylenes



Acenaphthenes and acenaphthylenes, unsubstituted

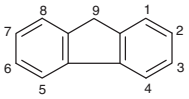
0002.12-K-IO	Acenaphthylene	152.20	[208-96-8]	1000µg/mL	isooctane	1	1mL
0002.12-10MG	Acenaphthylene	152.20	[208-96-8]	neat		1	10mg
0732.12-K-IO	Acenaphthene	154.21	[83-32-9]	1000µg/mL	isooctane	1	1mL
0732.12-10MG	Acenaphthene	154.21	[83-32-9]	neat		1	10mg
1814.12-K-IO	3,4,5,11-Tetrahydroacenaphthene	158.25	[26761-12-6]	1000µg/mL	isooctane	1	1mL
3668.3-KIT	Acenaphthene / acenaphthylene Kit						Kit

Other acenaphthenes

1735.12-10MG	1-Acenaphthenol	170.21	[6306-07-6]	neat		1	10mg
0006.12-10MG	Acenaphthenequinone	182.18	[82-86-0]	neat		1	10mg
1113.12-100-T	5-Nitroacenaphthene	199.21	[602-87-9]	100µg/mL	toluene	1	1ml
1113.12-10MG	5-Nitroacenaphthene	199.21	[602-87-9]	neat		1	10mg

Fluorenes

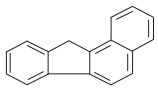
Fluorene/alkylfluorenes



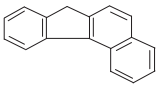
0217.13-K-T	Fluorene	166.22	[86-73-7]	1000µg/mL	toluene	1	1mL
0217.13-10MG	Fluorene	166.22	[86-73-7]	neat		1	10mg
0350.14-K-IO	1-Methylfluorene	180.25	[1730-37-6]	1000µg/mL	isooctane	1	1mL
0351.14-K-T	2-Methylfluorene	180.25	[1430-97-3]	1000µg/mL	toluene	1	1mL
1091.14-K-IO	4-Methylfluorene	180.25	[1556-99-6]	1000µg/mL	isooctane	1	1mL
1090.14-K-IO	9-Methylfluorene	180.25	[2523-37-7]	1000µg/mL	isooctane	1	1mL
1090.14-10MG	9-Methylfluorene	180.25	[2523-37-7]	neat		1	10mg
0908.15-500-IO	1,7-Dimethylfluorene	194.28	[442-66-0]	500µg/mL	isooctane	1	1mL
0352.15-K-IO	9-Ethylfluorene	194.28	[2294-82-8]	1000µg/mL	isooctane	1	1mL
1694.16-K-IO	9-n-Propylfluorene	208.31	[4037-45-0]	1000µg/mL	isooctane	1	1mL
1696.17-K-IO	9-n-Butylfluorene	222.33	[3952-42-9]	1000µg/mL	isooctane	1	1mL
3548.26-K-IO	9,9'-Bifluorenylidene	328.41	[746-47-4]	1000µg/mL	isooctane	1	1mL
3549.29-K-IO	9,9-Di-n-octylfluorene	390.64	[123863-99-0]	1000µg/mL	isooctane	1	1mL
1181.11-KIT	Fluorene / Alkylfluorene Kit						Kit

Benzofluorenes

0259.17-K-T	11H-Benzo[a]fluorene	216.29	[238-84-6]	1000µg/mL	toluene	1	1mL



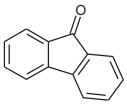
0259.17-10MG	11H-Benzo[a]fluorene	216.29	[238-84-6]	neat		1	10mg
0218.17-200-T	11H-Benzo[b]fluorene	216.29	[243-17-4]	200µg/mL	toluene	1	1mL
0218.17-10MG	11H-Benzo[b]fluorene	216.29	[243-17-4]	neat		1	10mg
0309.17-200-T	7H-Benzo[c]fluorene	216.29	[205-12-9]	200µg/mL	toluene	1	1mL



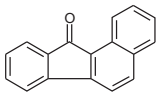
0353.19-K-IO	9-Phenylfluorene	242.32	[2503-67-2]	1000µg/mL	isooctane	1	1mL
0397.4-KIT	Benzo- / Phenylfluorenes Kit						Kit

Hydroxy- / Ketofluorenes

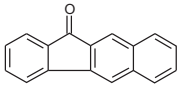
2322.13-K-IO	9-Fluorenone	180.21	[486-25-9]	1000µg/mL	isooctane	1	1mL



1599.13-10MG	2-Hydroxyfluorene	182.22	[2443-58-5]	neat		1	10mg
1737.13-10MG	9-Hydroxyfluorene	182.22	[1689-64-1]	neat		1	10mg
1734.13-10MG	1-Hydroxy-9-fluorenone	196.21	[6344-60-1]	neat		1	10mg
1509.13-10MG	2-Hydroxy-9-fluorenone	196.21	[6949-73-1]	neat		1	10mg
0052.17-200-T	Benzo[a]fluoren-11-one	230.27	[479-79-8]	200µg/mL	toluene	1	1mL



0053.17-200-T	Benzo[b]fluoren-11-one	230.27	[3074-03-1]	200µg/mL	toluene	1	1mL



3671.7-KIT	Hydroxy-/Ketofluorene Kit						Kit
3547.27-10MG	Truxenone	384.38	[4430-15-3]	neat		1	10mg

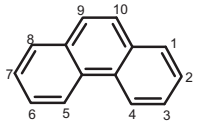
Nitrofluorenes

1108.13-100-T	2-Nitrofluorene	211.22	[607-57-8]	100µg/mL	toluene	1	1mL
1108.13-10MG	2-Nitrofluorene	211.22	[607-57-8]	neat		1	10mg
1111.13-10MG	2,7-Dinitrofluorene	256.22	[5405-53-8]	neat		1	10mg
1111.13-100-T	2,7-Dinitrofluorene	256.22	[5405-53-8]	100µg/mL	toluene	1	1mL
3550.13-100-T	2-Nitro-9-fluorenone	225.20	[3096-52-4]	100µg/mL	toluene	1	1mL
1457.3-KIT	Nitrofluorene Kit						Kit

Aminofluorenes

1761.13-10MG	2-Aminofluorene	181.24	[153-78-6]	neat		1	10mg
1764.13-10MG	2-Amino-9-fluorenone	195.22	[3096-57-9]	neat		1	10mg
1762.13-10MG	2,7-Diaminofluorene	196.25	[525-64-4]	neat		1	10mg
1763.13-10MG	9-Aminofluorene hydrochloride	217.70	[59978-75-6]	neat		1	10mg
1907.4-KIT	Aminofluorene Kit						Kit

Phenanthrenes



C0-C1 Phenanthrenes

0816.14-K-IO	Phenanthrene		178.24	[85-01-8]	1000µg/mL	isooctane	1	1mL
0816.14-10MG	Phenanthrene		178.24	[85-01-8]	neat		1	10mg
0811.15-K-IO	1-Methylphenanthrene	1-MP	192.26	[832-69-9]	1000µg/mL	isooctane	1	1mL
0812.15-K-IO	2-Methylphenanthrene	2-MP	192.26	[2531-84-2]	1000µg/mL	isooctane	1	1mL
0813.15-K-IO	3-Methylphenanthrene	3-MP	192.26	[832-71-3]	1000µg/mL	isooctane	1	1mL
1719.15-500-IO	4-Methylphenanthrene	4-MP	192.26	[832-64-4]	500µg/mL	isooctane	1	1mL
0815.15-K-IO	9-Methylphenanthrene	9-MP	192.26	[883-20-5]	1000µg/mL	isooctane	1	1mL
0820.6-KIT	C0-C1 Phenanthrenes Kit							Kit

C2 Phenanthrenes

0760.16-500-IO	1,2-Dimethylphenanthrene	1,2-DMP	206.29	[20291-72-9]	500µg/mL	isooctane	1	1mL
0876.16-500-IO	1,3-Dimethylphenanthrene	1,3-DMP	206.29	[16664-45-2]	500µg/mL	isooctane	1	1mL
0877.16-500-IO	1,4-Dimethylphenanthrene	1,4-DMP	206.29	[22349-59-3]	500µg/mL	isooctane	1	1mL
0761.16-K-IO	1,5-/1,7-Dimethylphenanthrene	1,5-/1,7-DMP	206.29	[66271-87-2/] [483-87-4]	1000µg/mL	isooctane	1	1mL
0762.16-500-IO	1,6-Dimethylphenanthrene	1,6-DMP	206.29	[20291-74-1]	500µg/mL	isooctane	1	1mL
1693.16-500-IO	1,7-Dimethylphenanthrene	1,7-DMP	206.29	[483-87-4]	500 µg/mL	isooctane	1	1mL
0763.16-500-IO	1,8-Dimethylphenanthrene	1,8-DMP	206.29	[7372-87-4]	500µg/mL	isooctane	1	1mL
0764.16-500-IO	1,9-Dimethylphenanthrene	1,9-DMP	206.29	[20291-73-0]	500µg/mL	isooctane	1	1mL
0879.16-K-IO	2,3-/3,4-Dimethylphenanthrene (49/45%)	2,3-/3,4-DMP	206.29	[3674-65-5/] [66291-31-4]	1000µg/mL	isooctane	1	1mL
0880.16-500-IO	2,4-Dimethylphenanthrene	2,4-DMP	206.29	[15254-64-5]	500µg/mL	isooctane	1	1mL
2122.16-500-IO	2,5/2,7-Dimethylphenanthrene (60/40%)	2,5/2,7-DMP	206.29	[3674-66-6]	500µg/mL	isooctane	1	1mL
0765.16-K-IO	2,5-/2,7-/4,5-Dimethylphenanthrene (56/24/2%)	2,5-/2,7-/4,5-DMP	206.29	[3674-66-6/] [1576-69-8/] [3674-69-9]	1000µg/mL	isooctane	1	1mL
0766.16-K-IO	2,6-/3,5-Dimethylphenanthrene	2,6/3,5-DMP	206.29	[17980-16-4/] [33954-06-2]	1000µg/mL	isooctane	1	1mL
2121.16-500-IO	2,7-Dimethylphenanthrene	2,7-DMP	206.29	[1576-69-8]	500µg/mL	isooctane	1	1mL
0767.16-K-IO	2,9-/4,9-Dimethylphenanthrene	2,9-/4,9-DMP	206.29	[17980-09-5/] [66291-34-7]	1000µg/mL	isooctane	1	1mL
0881.16-K-IO	2,10-/4,10-Dimethylphenanthrene	2,10-/4,10-DMP	206.29	[2479-54-3/] [23189-63-1]	1000µg/mL	isooctane	1	1mL
0768.16-500-IO	3,6-Dimethylphenanthrene	3,6-DMP	206.29	[1576-67-6]	500µg/mL	isooctane	1	1mL
0769.16-500-IO	3,9-Dimethylphenanthrene	3,9-DMP	206.29	[66291-32-5]	500µg/mL	isooctane	1	1mL

0882.16-500-IO	3,10-Dimethylphenanthrene	3,10-DMP	206.29	[66291-33-6]	500µg/mL	isooctane	1	1mL
0771.16-500-IO	9,10-Dimethylphenanthrene	9,10-DMP	206.29	[604-83-1]	500µg/mL	isooctane	1	1mL
0883.16-500-IO	3-Ethylphenanthrene	3-EP	206.29	[1576-68-7]	500µg/mL	isooctane	1	1mL
1028.16-K-IO	9-Ethylphenanthrene	9-EP	206.29	[3674-75-7]	1000µg/mL	isooctane	1	1mL
3672.26-KIT	C2 Phenanthrene Kit							Kit
0770.24-KIT	Dimethylphenanthrene Kit							Kit

C3 Phenanthrenes

0456.17-200-IO	1,2,4-Trimethylphenanthrene	1,2,4-TMP	220.32	[23189-64-2]	200µg/mL	isooctane	1	1mL
0781.17-K-IO	1,2,5-/1,2,7-Trimethylphenanthrene	1,2,5-/1,2,7-TMP	220.32	[146448-87-5/ 60490-68-8]	1000µg/mL	isooctane	1	1mL
0782.17-500-IO	1,2,6-Trimethylphenanthrene	1,2,6-TMP	220.32	[30436-55-6]	500µg/mL	isooctane	1	1mL
0783.17-500-IO	1,2,8-Trimethylphenanthrene	1,28-TMP	220.32	[20291-75-2]	500µg/mL	isooctane	1	1mL
0784.17-500-IO	1,2,9-Trimethylphenanthrene	1,2,9-TMP	220.32	[146448-88-6]	500µg/mL	isooctane	1	1mL
0457.17-200-IO	1,3,4-Trimethylphenanthrene	1,3,4-TMP	220.32	[66271-45-2]	200µg/mL	isooctane	1	1mL
0458.17-200-IO	2,6,9-Trimethylphenanthrene	2,6,9-TMP	220.32	[66271-32-7]	200µg/mL	isooctane	1	1mL
1697.17-K-IO	9-n-Propylphenanthrene	9-n-PrP	220.32	[17024-03-2]	1000µg/mL	isooctane	1	1mL
3551.9-KIT	C3 Phenanthrene Kit							Kit

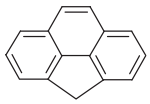
C4+ Phenanthrenes

0785.18-500-IO	1,2,6,9-Tetramethylphenanthrene		234.34	[204256-39-3]	500µg/mL	isooctane	1	1mL
1026.18-500-IO	9-n-Butylphenanthrene		234.34	[10394-57-7]	500µg/mL	isooctane	1	1mL
0794.18-500-IO	1-Methyl-7-isopropylphenanthrene	Retene	234.34	[483-65-8]	500µg/mL	isooctane	1	1mL
0073.18-500-IO	1,9-Dimethyl-7-ethylphenanthrene/ 1,9-Dimethyl-5-ethylphenanthrene			[-/46870-52-4]	500µg/mL	isooctane	1	1mL
0780.9-KIT	Tri- and tetramethylphenanthrene Kit							Kit
3552.5-KIT	C4+ Phenanthrene Kit							Kit

Other phenanthrenes

0444.15 **4H-Cyclopenta[def]-phenanthrene**

[203-64-5] MW 190.25

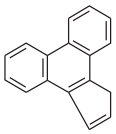


0444.15-500-IO 500 µg/mL isooctane, 1x1mL

0444.15-10MG neat, 1x10mg

1722.17 **1H-Cyclopenta[l]phenanthrene**

[235-92-7] MW 216.29

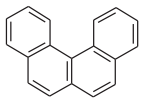


1722.17-500-IO 500 µg/mL isooctane, 1x1mL

0027.18 **Benzo[c]phenanthrene**

(4)Helicene

[195-19-7] MW 228.30

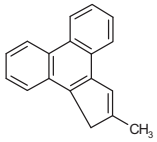


0027.18-200-T 200µg/mL toluene, 1x1mL

0027.18-10MG neat, 1x10mg

1723.18 **2-Methylcyclopenta[l]-phenanthrene**

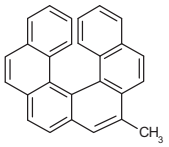
[121254-39-5] MW 230.31



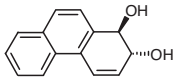
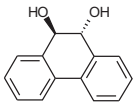
1723.18-500-IO 500 µg/mL isooctane, 1x1mL

1487.20	**Phenanthryl-9-O-glucuronide**	
	[177194-36-4] MW 370.36	
	Please inquire	

0001.18	**Triphenylene**	
	[217-59-4] MW 228.30	
0001.18-200-T	200µg/mL toluene, 1x1mL	

2576.27	**3-Phenanthro-[3,4-c]phenanthrene**	
	[83844-21-7] MW 342.44	
		
2576.27-10UG	neat, 1x10µg	
2576.27-100-T	100µg/mL toluene, 1x1mL	

Hydroxyphenanthrenes

0321.14-10MG	1-Hydroxyphenanthrene	194.24	[2433-56-9]	neat		1	10mg
0322.14-10MG	2-Hydroxyphenanthrene	194.24	[605-55-0]	neat		1	10mg
0323.14-10MG	3-Hydroxyphenanthrene	194.24	[605-87-8]	neat		1	10mg
0324.14-10MG	4-Hydroxyphenanthrene	194.24	[7651-86-7]	neat		1	10mg
0325.14-10MG	9-Hydroxyphenanthrene	194.24	[484-17-3]	neat		1	10mg
1925.10	trans-1,2-Dihydroxy-1,2-dihydrophenanthrene	212.25	[60917-41-1]	Please inquire		1	
							
1488.14-10MG	trans-9,10-Dihydroxy-9,10-dihydrophenanthrene	212.25	[572-41-8]	neat		1	10mg
							
1288.6-KIT	Hydroxyphenanthrene Kit (without 1925,14)						Kit

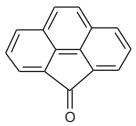
Methoxyphenanthrenes

1726.15-K-IO	1-Methoxyphenanthrene	208.26	[834-99-1]	1000µg/mL	isooctane	1	1mL
3674.15-K-IO	2-Methoxyphenanthrene	208.26	[13837-48-4]	1000µg/mL	isooctane	1	1mL
1728.15-K-IO	3-Methoxyphenanthrene	208.26	[835-06-3]	1000µg/mL	isooctane	1	1mL
3675.15-K-IO	4-Methoxyphenanthrene	208.26	[15638-06-9]	1000µg/mL	isooctane	1	1mL
1729.15-K-IO	9-Methoxyphenanthrene	208.26	[5085-74-5]	1000µg/mL	isooctane	1	1mL
3673.5-KIT	Methoxyphenanthrene Kit						Kit

Ketophenanthrenes

0055.15 **4H-Cyclopenta[def] phenanthren-4-one**

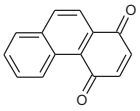
[5737-13-3] MW 204.23



0055.15-10MG	neat, 1x10mg

0051.14 **Phenanthrene-1,4-dione**

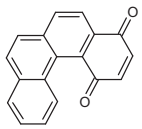
[569-15-3] MW 208.22



0051.14-10MG	neat, 1x10mg

0056.18 **Benzo[c]phenanthrene-[1,4]quinone**

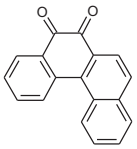
[109699-80-1] MW 258.28



0056.18-10MG	neat, 1x10mg

0057.18 **Benzo[c]phenanthrene[5,6]-quinone**

[734-41-8] MW 258.28



0057.18-10MG	neat, 1x10mg

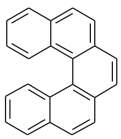
Nitro-/ Aminophenanthrenes

2206.14-K-IO	2-Nitrophenanthrene	223.23	[17024-18-9]	1000µg/mL	isooctane	1	1mL
2205.14-300-IO	3-Nitrophenanthrene	223.23	[17024-19-0]	300µg/mL	isooctane	1	1mL
2204.14-K-IO	9-Nitrophenanthrene	223.23	[954-46-1]	1000µg/mL	isooctane	1	1mL
2204.14-10MG	9-Nitrophenanthrene	223.23	[954-46-1]	neat		1	10mg
0041.18-100-T	5-Nitrobenzo[c]phenanthrene	273.29	[64356-30-5]	100µg/mL	toluene	1	1mL
0041.18-10MG	5-Nitrobenzo[c]phenanthrene	273.29	[64356-30-5]	neat		1	10mg
3553.13-10MG	9-Aminoflourene	181.23	[525-03-1]	neat		1	10mg

Helicenes

0032.22 **(5)Helicene**

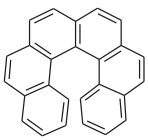
[188-52-3] MW 278.36



0032.22-10UG	neat, 1x10µg
0032.22-10MG	1x10mg

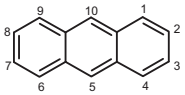
0020.26 **(6)Helicene**

[187-83-7] MW 328.42



0020.26-1UG	neat, 1x10µg

Anthracenes



C0-C1 Anthracenes

1049.14-K-IO	Anthracene	178.24	[120-12-7]	1000µg/mL	isooctane	1	1mL
1049.14-10MG	Anthracene	178.24	[120-12-7]	neat		1	10mg
0459.15-K-IO	1-Methylanthracene	192.26	[610-48-0]	1000µg/mL	isooctane	1	1mL
0460.15-K-IO	2-Methylanthracene	192.26	[613-12-7]	1000µg/mL	isooctane	1	1mL
0460.15-10MG	2-Methylanthracene	192.26	[613-12-7]	neat		1	10mg
0461.15-K-IO	9-Methylanthracene	192.26	[779-02-2]	1000µg/mL	isooctane	1	1mL
3815.4-KIT	C0-C1 Anthracene Kit						Kit

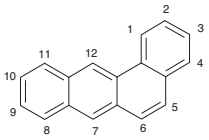
C2 Anthracenes

0463.16-200-T	1,2-Dimethylanthracene	206.29	[53666-94-7]	200µg/mL	toluene	1	1mL
0464.16-200-T	1,3-Dimethylanthracene	206.29	[610-46-8]	200µg/mL	toluene	1	1mL
0465.16-200-T	1,4-Dimethylanthracene	206.29	[781-92-0]	200µg/mL	toluene	1	1mL
0466.16-200-T	1,5-Dimethylanthracene	206.29	[15815-48-2]	200µg/mL	toluene	1	1mL
0467.16-200-T	2,3-Dimethylanthracene	206.29	[613-06-9]	200µg/mL	toluene	1	1mL
0468.16-200-T	2,7-Dimethylanthracene	206.29	[782-23-0]	200µg/mL	toluene	1	1mL
0168.16-10MG	9,10-Dimethylanthracene	206.29	[178-43-1]	neat		1	10mg
0168.16-200-T	9,10-Dimethylanthracene	206.29	[178-43-1]	200µg/mL	toluene	1	1mL
0354.16-K-IO	2-Ethylanthracene	206.29	[52251-71-5]	1000µg/mL	isooctane	1	1mL
0113.7-KIT	Dimethylanthracene Kit						Kit
3676.8-KIT	C2 Anthracene Kit						Kit

C3-C4 Anthracenes

0471.17-200-T	1,2,4-Trimethylanthracene	220.32	[20153-28-0]	200µg/mL	toluene	1	1mL
0472.18-200-T	1,2,3,4-Tetramethylanthracene	234.34	[66553-01-3]	200µg/mL	toluene	1	1mL
0473.18-200-T	2,3,6,7-Tetramethylanthracene	234.34	[15254-25-8]	200µg/mL	toluene	1	1mL
0474.18-200-T	2,3,9,10-Tetramethylantracene	234.34	[66552-77-0]	200µg/mL	toluene	1	1mL
1092.18-K-IO	2-(tert-Butyl)anthracene	234.34	[18801-00-8]	1000µg/mL	isooctane	1	1mL
1034.5-KIT	C3-C4 Anthracene Kit						Kit

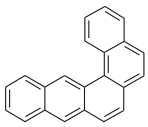
Benz[a]anthracenes



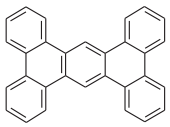
0201.18-200-T	Benz[a]anthracene	228.30	[56-55-3]	200µg/mL	toluene	1	1mL
0201.18-500-T	Benz[a]anthracene	228.30	[56-55-3]	500 µg/mL	toluene	1	1mL
0201.18-10MG	Benz[a]anthracene	228.30	[56-55-3]	neat		1	10mg
0298.19-50-T	1-Methylbenz[a]anthracene	242.32	[2498-77-3]	50 µg/mL	neat	1	1mL
0398.19-200-T	5-Methylbenz[a]anthracene	242.32	[2319-96-2]	200µg/mL	toluene	1	1mL
0399.19-200-T	6-Methylbenz[a]anthracene	242.32	[316-14-3]	200µg/mL	toluene	1	1mL
0299.19-50-T	7-Methylbenz[a]anthracene	242.32	[2541-69-7]	50µg/mL	toluene	1	1mL
0300.19-200-T	10-Methylbenz[a]anthracene	242.32	[2381-15-9]	200µg/mL	toluene	1	1mL
1513.19	11-Methylbenz[a]anthracene	242.32	[6111-78-0]	Please inquire			
0100.20-200-T	3,9-Dimethylbenz[a]anthracene	256.35	[316-51-8]	200µg/mL	toluene	1	1mL
0301.20-200-T	7,12-Dimethylbenz[a]anthracene	256.35	[57-97-6]	200µg/mL	toluene	1	1mL
3076.8-KIT	C0-C2 Benzanthracene Kit (not including 1513.19)						Kit

Dibenz- / Naphthanthracenes

0202.22-10MG	Dibenz[a,c]anthracene	278.36	[215-58-7]	neat		1	10mg
0203.22-200-T	Dibenz[a,h]anthracene	278.36	[53-70-3]	200µg/mL	toluene	1	1mL
0203.22-10MG	Dibenz[a,h]anthracene	278.36	[53-70-3]	neat		1	10mg
0204.22-200-T	Dibenz[a,j]anthracene	278.36	[224-41-9]	200µg/mL	toluene	1	1mL
0012.22-200-T	Napht[1,2-a]anthracene Napht-(1'.2',1.2)-anthracene	278.36	[195-06-2]	200µg/mL	toluene	1	1mL



0012.22-5MG	Napht[1,2-a]anthracene Napht-(1'.2',1.2)-anthracene	278.36	[195-06-2]	neat		1	5mg
0205.30-200-T	Tetrabenz[a,c,h,j]anthracene	378.48	[215-11-2]	200µg/mL	toluene	1	1mL

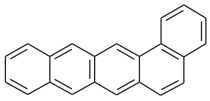


0205.30-5MG	Tetrabenz[a,c,h,j]anthracene	378.48	[215-11-2]	neat		1	5mg
1042.14-KIT	Benzanthracene/ Dibenzanthracene/ Naphthoanthracene Kit						Kit
3077.6-KIT	Dibenz- / Naphthoanthracene Kit						Kit

Other anthracenes

0207.22 **Benzo[a]tetracene**

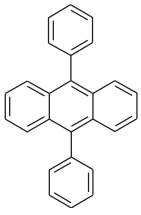
[226-88-0] MW 278.36



0207.22-10MG neat, 1x10mg

0355.26 **9,10-Diphenylanthracene**

[1499-10-1] MW 330.43

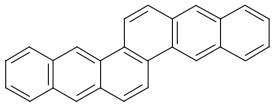


0355.26-200-T 200µg/mL toluene, 1x1mL

0355.26-10MG neat, 1x10mg

0030.26 **Dibenzo[b,k]chrysene**

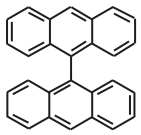
[217-54-9] MW 328.42



0030.26-200-T 200µg/mL toluene, 1x1mL

3554.28 **9,9'-Bianthracene**

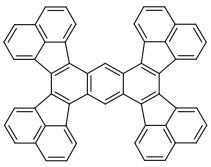
[1055-23-8] MW 354.46



3554.28-K-T 1000µg/mL toluene, 1x1mL

0282.54 **1.2,3.4,5.6,7.8-Tetra-(peri-naphthylene)anthracene**

[191-54-8] MW 674.81



0282.54-200-T 200µg/mL toluene, 1x1mL

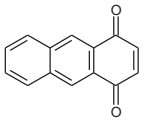
0115.5 **Other Anthracenes Kit**

0115.5-KIT Kit

Hydroxy-/ ketoanthracenes

NEW

0016.14 **1,4-Anthraquinone**
[635-12-1] MW 208.22



0016.14-10MG neat, 1x10mg

3560.15 **2-Methyl-9,10-anthraquinone**
[84-54-8] MW 222.24

3560.15-10MG neat, 1x10mg

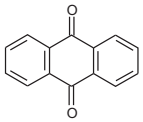
3562.16 **2,3-Dimethyl-9,10-anthraquinone**
[6531-35-7] MW 236.27

3562.16-10MG neat, 1x10mg

3561.16 **2-Ethyl-9,10-anthraquinone**
[84-51-5] MW 236.27

3561.16-10MG neat, 1x10mg

1178.14 **9,10-Anthraquinone**
[84-65-1] MW 208.22



1178.14-10MG neat, 1x10mg

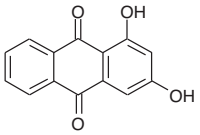
3677.14 **1-Hydroxyanthracene**
[129-43-1] MW 224.22

3677.14-10MG neat, 1x10mg

8015.14 **2-Hydroxy-9,10-anthraquinone**
[605-32-3] MW 224.22

8015.14-10MG neat, 1x10mg

1679.14 **1,3-Dihydroxy-9,10-anthraquinone**
[518-83-2] MW 240.22



1679.14-10MG neat, 1x10mg

3557.14 **1,4-Dihydroxy-9,10-anthraquinone**
Quinizarin
[81-64-1] MW 240.22

3557.14-10MG neat, 1x10mg

3558.14 **1,5-Dihydroxy-9,10-anthraquinone**
Anthrarubin
[117-12-4] MW 240.22

3558.14-10MG neat, 1x10mg

3555.14 **1,8-Dihydroxy-9,10-anthraquinone**
[117-10-2] MW 240.22

3555.14-10MG neat, 1x10mg

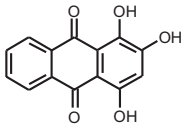
3556.14 **2,6-Dihydroxy-9,10-anthraquinone**
Anthraflavic acid
[84-60-6] MW 240.22

3556.14-10MG neat, 1x10mg

3559.14 **1,2,4-Trihydroxy-9,10-anthraquinone**

Purpurin

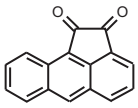
[81-54-9] MW 256.21



3559.14-10MG neat, 1x10mg

3563.16 **Aceanthracenequinone**

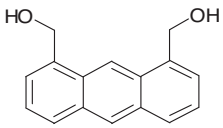
MW 232.23



3563.16-10MG neat, 1x10mg

1809.16 **1,8-Bis(hydroxymethyl) anthracene**

[34824-20-9] MW 238.29

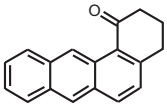


1809.16-K-IO 1000μg/mL isooctane, 1x1mL

1809.16-10MG neat, 1x10mg

3564.18 **3,4-Dihydrobenzo[a]anthracene-1(2H)-one**

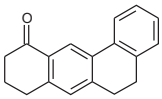
[57652-74-1] MW 246.30



3564.18-10MG neat, 1x10mg

1291.18 **5,6,8,9-Tetrahydrobenz[a]anthracen-11(10H)-one**

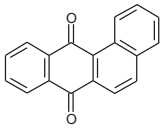
[1470-04-8] MW 248.33



1291.18-10MG neat, 1x10mg

1733.18 **1,2-Benz[a]anthraquinone**

[2498-66-0] MW 258.28



1733.18-10MG neat, 1x10mg

Nitroanthracenes

1459.14-200-T	2-Nitroanthracene	223.23	[3586-69-4]	200μg/mL	toluene	1	1mL
1459.14-10MG	2-Nitroanthracene	223.23	[3586-69-4]	neat		1	10mg
1106.14-100-T	9-Nitroanthracene	223.23	[602-60-8]	100μg/mL	toluene	1	1mL
1460.15-100-T	9-Methyl-10-nitroanthracene	237.26	[84457-22-7]	100μg/mL	toluene	1	1mL
1461.14-10MG	2,9-Dinitroanthracene	268.23	[234076-75-6]	neat		1	10mg
0042.14-100-T	9,10-Dinitroanthracene	268.23	[33685-60-8]	100μg/mL	toluene	1	1mL
0042.14-10MG	9,10-Dinitroanthracene	268.23	[33685-60-8]	neat		1	10mg
1462.4-KIT	Nitroanthracene Kit (Not including 1461.14)						Kit

Nitrobenzanthracenes

0043.18-100-T	7-Nitrobenz[a]anthracene	273.29	[20268-51-3]	100μg/mL	toluene	1	1mL
0043.18-10MG	7-Nitrobenz[a]anthracene	273.29	[20268-51-3]	neat		1	10mg
0044.22-100-T	7-Nitrobenz[a,h]anthracene	323.35	[63041-91-8]	100μg/mL	toluene	1	1mL
0044.22-10MG	7-Nitrobenz[a,h]anthracene	323.35	[63041-91-8]	neat		1	10mg
1484.2-KIT	Nitrobenzanthracene Kit						Kit

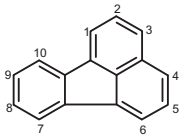
Aminoanthracenes

1784.14-10MG	1-Aminoanthracene	193.25	[610-49-1]	neat		1	10mg
1765.14-10MG	2-Aminoanthracene	193.25	[613-13-8]	neat		1	10mg
1793.18-10MG	7-Aminobenz[a]anthracene	243.31	[2381-18-2]	neat		1	10mg
1908.2-KIT	Aminoanthracene Kit (Not including 1793.18)						Kit

Bromobenzanthracenes

1813.18-10MG	7-Bromobenz[a]anthracene	307.19	[32795-84-9]	neat		1	10mg

Fluoranthrenes

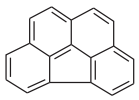


Fluoranthene and alkylfluoranthenes

0260.16-200-T	Fluoranthene	202.26	[206-44-0]	200µg/mL	toluene	1	1mL
0260.16-10MG	Fluoranthene	202.26	[206-44-0]	neat		1	10mg
1724.16-200-T	1,2,3,10b-Tetrahydrofluoranthene	206.29	[20279-21-4]	200µg/mL	toluene	1	1mL
0289.17-200-T	1-Methylfluoranthene	216.29	[25889-60-5]	200µg/mL	toluene	1	1mL
0290.17-200-T	2-Methylfluoranthene	216.29	[33543-31-6]	200µg/mL	toluene	1	1mL
0291.17-200-T	3-Methylfluoranthene	216.29	[1706-01-0]	200µg/mL	toluene	1	1mL
1218.18-200-T	3-Ethylfluoranthene	230.31	[20496-16-6]	200µg/mL	toluene	1	1mL
1182.6-KIT	Fluoranthene and Alkylfluoranthene Kit						Kit

Benzofluoranthene and phenylfluoranthene

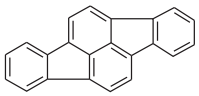
0262.20-200-T	Benzo[a]fluoranthene	252.32	[203-33-8]	200µg/mL	toluene	1	1mL
0263.20-10MG	Benzo[b]fluoranthene	252.32	[205-99-2]	neat		1	10mg
0263.20-200-T	Benzo[b]fluoranthene	252.32	[205-99-2]	200µg/mL	toluene	1	1mL
0264.20-100-ME	Benzo[j]fluoranthene	252.32	[205-82-3]	100µg/mL	methanol	1	1mL
0264.20-200-T	Benzo[j]fluoranthene	252.32	[205-82-3]	200µg/mL	toluene	1	1mL
0265.20-200-T	Benzo[k]fluoranthene	252.32	[207-08-9]	200µg/mL	toluene	1	1mL
0265.20-10MG	Benzo[k]fluoranthene	252.32	[207-08-9]	neat		1	10mg
0261.18-200-T	Benzo[ghi]fluoranthene	226.28	[203-12-3]	200µg/mL	toluene	1	1mL



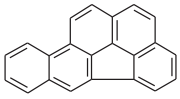
0284.22-200-T	2-Phenylfluoranthene	278.36	[4914-78-7]	200µg/mL	toluene	1	1mL
0284.22-10MG	2-Phenylfluoranthene	278.36	[4914-78-7]	neat		1	10mg
1183.6-KIT	Benzofluoranthene and Phenylfluoranthene Kit						Kit

Indeno- / dibenzofluoranthenes

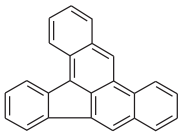
0278.22-200-T	Indeno[1,2,3-cd]fluoranthene	276.34	[193-43-1]	200µg/mL	toluene	1	1mL



0278.22-10MG	Indeno[1,2,3-cd]fluoranthene	276.34	[193-43-1]	neat		1	10mg
0266.22-10MG	Dibenzo[b,ghi]fluoranthene	276.34	[203-25-8]	neat		1	10mg



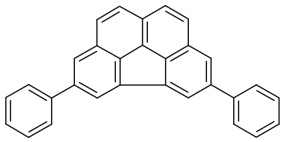
0267.24-200-T	Dibenzo[a,e]fluoranthene	302.38	[5385-75-1]	200µg/mL	toluene	1	1mL



0267.24-10MG	Dibenzo[a,e]fluoranthene	302.38	[5385-75-1]	neat		1	10mg
0273.24-10MG	Dibenzo[a,k]fluoranthene	302.38	[84030-79-5]	neat		1	10mg
0274.24-10MG	Dibenzo[b,k]fluoranthene	302.38	[205-97-0]	neat		1	10mg
0275.24-10MG	Dibenzo[j,l]fluoranthene	302.38	[203-18-9]	neat		1	10mg
1185.6-KIT	Indeno- and Dibenzofluoranthenes Kit						Kit

Phenylbenzofluoranthene

0285.26-10MG	2-Phenylbenzo[b]fluoranthene	328.42	[210487-01-7]	neat		1	10mg
0286.26-10MG	2-Phenylbenzo[j]fluoranthene	328.42	[210487-02-8]	neat		1	10mg
0287.26-10MG	5-Phenylbenzo[j]fluoranthene	328.42	[210487-03-9]	neat		1	10mg
3918.30-10MG	4,7-Diphenylbenzo[ghi]fluoranthene	378.48	[210487-04-0]	neat	t	1	10mg

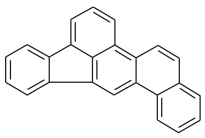


1184.4-KIT	Phenylbenzofluoranthene Kit						Kit

Naphthofluoranthenes

0276.24 **Naphtho[1,2-b]fluoranthene**

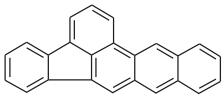
[5385-22-8] MW 302.38



0276.24-200-T	200µg/mL toluene, 1x1mL
0276.24-10MG	neat, 1x10mg

0269.24 **Naphtho[2,3-b]fluoranthene**

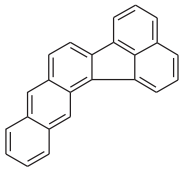
[206-06-4] MW 302.38



0269.24-200-T	200µg/mL toluene, 1x1mL
0269.24-10MG	neat, 1x10mg

0272.24 **Naphtho[2,3-j]fluoranthene**

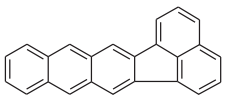
[205-83-4] MW 302.38



0272.24-200-T	200µg/mL toluene, 1x1mL
0272.24-10MG	neat, 1x10mg

0271.24 **Naphtho[2,3-k]fluoranthene**

[207-18-1] MW 302.38



0271.24-200-T	200µg/mL toluene, 1x1mL
0271.24-10MG	neat, 1x10mg

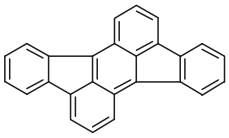
1186.4 **Naphthofluoranthene Kit**

1186.4-KIT	Kit

Other fluoranthenes

0279.27 **Rubicene**

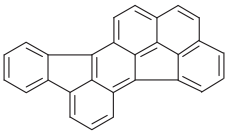
[197-61-5] MW 326.40



0279.27-10MG neat, 1x10mg

2579.28 **Benzo[cde]rubicene**

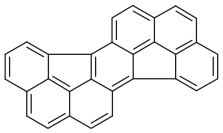
MW 350.42



Please inquire

2582.30 **Dibenzo[cde:opq]rubicene**

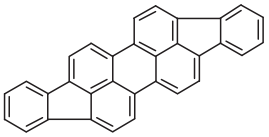
[175289-30-2] MW 374.45



2582.30-50-T 50μg/mL toluene, 1x1mL

0280.32 **Periflanthene**

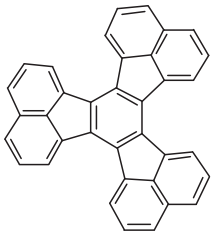
[188-94-3] MW 400.48



0280.32-10MG neat, 1x10mg

0281.36 **Decacyclene**

[191-48-0] MW 450.54



0281.36-10MG neat, 1x10mg

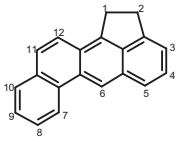
Nitrofluoranthrenes

1463.16-100-T	1-Nitrofluoranthene	247.26	[13177-28-1]	100μg/mL	toluene	1	1mL
1463.16-2MG	1-Nitrofluoranthene	247.26	[13177-28-1]	neat		1	2mg
1463.16-10MG	1-Nitrofluoranthene	247.26	[13177-28-1]	neat		1	10mg
1278.16-100-T	2-Nitrofluoranthene	247.26	[13177-29-2]	100μg/mL	toluene	1	1mL
1278.16-2MG	2-Nitrofluoranthene	247.26	[13177-29-2]	neat		1	2mg
1278.16-5MG	2-Nitrofluoranthene	247.26	[13177-29-2]	neat		1	5mg
0025.16-100-T	3-Nitrofluoranthene	247.26	[892-21-7]	100μg/mL	toluene	1	1mL
0025.16-10MG	3-Nitrofluoranthene	247.26	[892-21-7]	neat		1	10mg
1467.3-KIT	Nitrofluoranthene Kit						Kit

Aminofluoranthenes

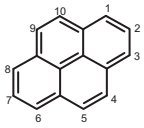
1766.16-10MG	3-Aminofluoranthene	217.27	[2693-46-1]	neat		1	10mg

Cholanthrenes



0036.20-200-T	Cholanthrene	254.33	[479-23-2]	200µg/mL	toluene	1	1mL
0005.21-200-T	3-Methylcholanthrene	268.36	[56-49-5]	200µg/mL	toluene	1	1mL
0005.21-10MG	3-Methylcholanthrene	268.36	[56-49-5]	neat		1	10mg
1187.2-KIT	Cholanthrene solutions Kit						Kit

Pyrenes

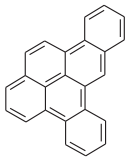


Pyrene and alkylpyrenes

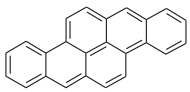
0235.16-200-T	Pyrene	202.26	[129-00-0]	200µg/mL	toluene	1	1mL
0235.16-10MG	Pyrene	202.26	[129-00-0]	neat		1	10mg
0304.17-200-T	1-Methylpyrene	216.29	[2381-21-7]	200µg/mL	toluene	1	1mL
1195.17-10-T	2-Methylpyrene	216.29	[3442-78-2]	10µg/mL	toluene	1	1mL
0305.17-200-T	4-Methylpyrene	216.29	[3353-12-6]	200µg/mL	toluene	1	1mL
1039.18-200-T	2,7-Dimethylpyrene	230.31	[15679-24-0]	200µg/mL	toluene	1	1mL
1038.18-200-T	4,5-Dimethylpyrene	230.31	[15679-25-1]	200µg/mL	toluene	1	1mL
1037.18-200-T	1-Ethylpyrene	230.31	[17088-22-1]	200µg/mL	toluene	1	1mL
1698.19-K-T	1-n-Propylpyrene	246.36	[42211-33-6]	1000µg/mL	toluene	1	1mL
1699.20-200-T	1-n-Butylpyrene	260.38	[35980-18-8]	200µg/mL	toluene	1	1mL
1699.20-K-T	1-n-Butylpyrene	260.38	[35980-18-8]	1000µg/mL	toluene	1	1mL
1188.9-KIT	Pyrene and Alkylpyrene Kit						Kit

Benzo- / Dibenzopyrenes

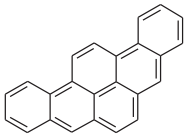
0239.20-200-T	Benzo[a]pyrene	252.32	[50-32-8]	200µg/mL	toluene	1	1mL
0239.20-10MG	Benzo[a]pyrene	252.32	[50-32-8]	neat		1	10mg
0236.20-200-T	Benzo[e]pyrene	252.32	[192-97-2]	200µg/mL	toluene	1	1mL
0236.20-10MG	Benzo[e]pyrene	252.32	[192-97-2]	neat		1	10mg
0306.21-200-T	6-Methylbenzo[a]pyrene	266.35	[2381-39-7]	200µg/mL	toluene	1	1mL
0371.21-200-T	7-Methylbenzo[a]pyrene	266.35	[63041-77-0]	200µg/mL	toluene	1	1mL
1507.22-50-T	7,10-Dimethylbenzo[a]pyrene	280.37	[63104-33-6]	50µg/mL	toluene	1	1mL
0244.24-10MG	Dibenzo[a,e]pyrene	302.38	[192-65-4]	neat		1	10mg



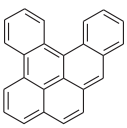
0244.24-200-T	Dibenzo[a,e]pyrene	302.38	[192-65-4]	200µg/mL	toluene	1	1mL
0242.24-200-T	Dibenzo[a,h]pyrene	302.38	[189-64-0]	200µg/mL	toluene	1	1mL

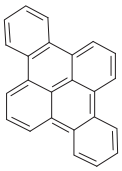


0242.24-10MG	Dibenzo[a,h]pyrene	302.38	[189-64-0]	neat		1	10mg
0241.24-200-T	Dibenzo[a,i]pyrene	302.38	[189-55-9]	200µg/mL	toluene	1	1mL

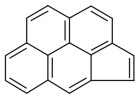
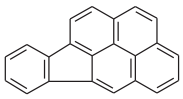
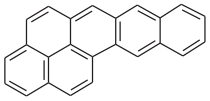
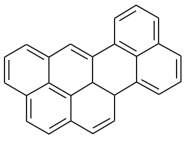
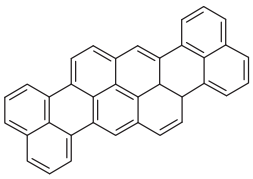


0243.24-200-T	Dibenzo[a,l]pyrene	302.38	[191-30-0]	200µg/mL	toluene	1	1mL

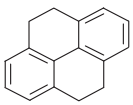
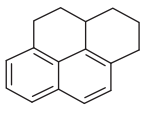


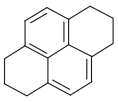
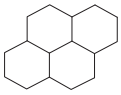
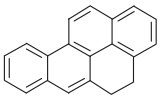
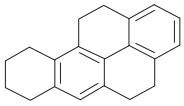
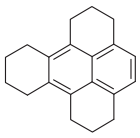
0237.24-200-T	Dibenzo[e,l]pyrene	302.38	[192-51-8]	200µg/mL	toluene	1	1mL
							
1189.10-KIT	Benzo- / and Dibenzopyrene Kit						Kit

Cyclopenta- / Indeno- / Naphthopyrenes

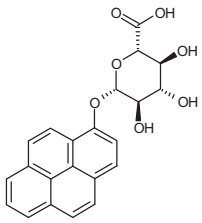
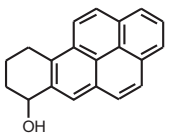
0035.18-200-T	Cyclopenta[cd]pyrene	226.28	[27208-37-3]	200µg/mL	toluene	1	1mL
							
0035.18-10MG	Cyclopenta[cd]pyrene	226.28	[27208-37-3]	neat		1	10mg
0277.22-200-T	Indeno[1,2,3-cd]pyrene	276.34	[193-39-5]	200µg/mL	toluene	1	1mL
							
0277.22-10MG	Indeno[1,2,3-cd]pyrene	276.34	[193-39-5]	neat		1	10mg
0240.24-200-T	Naphtho[2,3-a]pyrene	302.38	[196-42-9]	200µg/mL	toluene	1	1mL
							
0238.24-200-T	Naphtho[2,3-e]pyrene	302.38	[193-09-9]	200µg/mL	toluene	1	1mL
0245.26-200-T	2.3-Peri-naphthylene-pyrene	328.42	[188-89-6]	200µg/mL	toluene	1	1mL
							
0246.36-200-T	2.3,7.8-Di-(peri-naphthylene)-pyrene	452.56	[362052-03-7]	200µg/mL	toluene	1	1mL
							
1040.6-KIT	Cyclopenta- / Indeno- / Naphthopyrene Kit						Kit

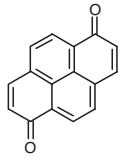
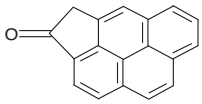
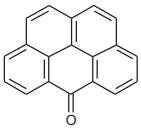
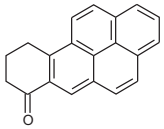
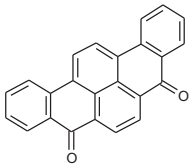
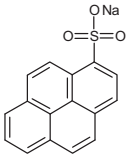
Hydropyrenes

2600.16-200-T	4,5,9,10-Tetrahydropyrene	206.29	[781-17-9]	200µg/mL	toluene	1	1mL
							
2602.16-200-T	1,2,3,3a,4,5-Hexahydropyrene	208.31	[5385-37-5]	200µg/mL	toluene	1	1mL
							
2602.16-10MG	1,2,3,3a,4,5-Hexahydropyrene	208.31	[5385-37-5]	neat		1	10mg

2601.16-200-T	1,2,3,6,7,8-Hexahydropyrene	208.31	[1732-13-4]	200µg/mL	toluene	1	1mL
							
2601.16-10MG	1,2,3,6,7,8-Hexahydropyrene	208.31	[1732-13-4]	neat		1	10mg
2603.16-200-T	Hexadecahydropyrene	218.39	[2435-85-0]	200µg/mL	toluene	1	1mL
							
2603.16-10MG	Hexadecahydropyrene	218.39	[2435-85-0]	neat		1	10mg
2606.20-200-T	4,5-Dihydrobenzo[a]pyrene	254.33	[57652-66-1]	200µg/mL	toluene	1	1mL
							
2607.20-200-T	4,5,7,8,9,10,11,12-Octahydrobenzo[a]pyrene	260.38	[73712-70-6]	200µg/mL	toluene	1	1mL
							
2608.20-200-T	1,2,3,6,7,8,9,10,11,12-Decahydrobenz[e]pyrene	262.40	[92387-50-3]	200µg/mL	toluene	1	1mL
							
2608.20-5MG	1,2,3,6,7,8,9,10,11,12-Decahydrobenz[e]pyrene	262.40	[92387-50-3]	neat		1	5mg

Hydroxy- / Methoxy- / Ketopyrenes

0021.16-200-T	1-Hydroxypyrene	218.26	[5315-79-7]	200µg/mL	toluene	1	1mL
0021.16-10MG	1-Hydroxypyrene	218.26	[5315-79-7]	neat		1	10mg
0060.20-200-T	3-Hydroxybenzo[a]pyrene	268.32	[13345-21-6]	200µg/mL	toluene	1	1mL
0060.20-2MG	3-Hydroxybenzo[a]pyrene	268.32	[13345-21-6]	neat		1	2mg
1489.22	Pyrenyl-1-O-glucuronide	394.38	[154717-05-2]	Please inquire			
							
3565.20-10MG	7,8,9,10-Tetrahydro-benzo[a}pyren-7-ol	272.34	[6272-55-5]	neat		1	10mg
							
1506.17-10MG	1-Methyoxypyrene	232.28	[34246-96-3]	neat		1	10mg

2899.16-10MG	1,6-Pyrenequinone	232.24	[17885-51-9]	neat		1	10mg
							
0063.18-10MG	Cyclopenta[cd]pyren-3(4H)-one	242.28	[69795-70-6]	neat		1	10mg
							
0059.19-200-T	6H-Benzo[cd]pyren-6-one	254.29	[3074-00-8]	200μg/mL	toluene	1	1mL
							
0059.19-10MG	6H-Benzo[cd]pyren-6-one	254.29	[3074-00-8]	neat		1	10mg
1293.20-10MG	9,10-Dihydrobenzo[a]pyren-7(8H)-one	270.33	[3331-46-2]	neat		1	10mg
							
0058.24-10MG	Dibenzo[a,i]pyrene[5,8]quinone	332.36	[3302-52-1]	neat		1	10mg
							
1596.16-10MG	Pyrene-1-sulfonic acid sodium salt	304.30	[59323-54-5]	neat		1	10mg
							

Nitropyrenes

0009.16-100-T	1-Nitropyrene	247.26	[5522-43-0]	100μg/mL	toluene	1	1mL
0009.16-10MG	1-Nitropyrene	247.26	[5522-43-0]	neat		1	10mg
1468.16-100-T	2-Nitropyrene	247.26	[789-07-1]	100μg/mL	toluene	1	1mL
1468.16-10MG	2-Nitropyrene	247.26	[789-07-1]	neat		1	10mg
0048.16-100-T	4-Nitropyrene	247.26	[57835-92-4]	100μg/mL	toluene	1	1mL
0048.16-10MG	4-Nitropyrene	247.26	[57835-92-4]	neat		1	10mg
0013.16-100-T	1,3-Dinitropyrene	292.25	[75321-20-9]	100μg/mL	toluene	1	1mL
0013.16-10MG	1,3-Dinitropyrene	292.25	[75321-20-9]	neat		1	10mg
0014.16-100-T	1,6-Dinitropyrene	292.25	[42397-64-8]	100μg/mL	toluene	1	1mL
0014.16-5MG	1,6-Dinitropyrene	292.25	[42397-64-8]	neat		1	5mg
0015.16-100-T	1,8-Dinitropyrene	292.25	[42397-65-9]	100μg/mL	toluene	1	1mL
0015.16-5MG	1,8-Dinitropyrene	292.25	[42397-65-9]	neat		1	5mg
1469.6-KIT	Nitropyrene Kit						Kit

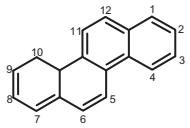
Nitrobenzo[a]- and nitrobenzo[e]pyrenes

1635.20-200-T	1-/3-Nitrobenzo[a]pyrene	297.32	[70021-99-7/] [70021-98-6]	200µg/mL	toluene	1	1mL
1635.20-2MG	1-/3-Nitrobenzo[a]pyrene	297.32	[70021-99-7/] [70021-98-6]	neat		1	2mg
0049.20-100-T	6-Nitrobenzo[a]pyrene	297.32	[63041-90-7]	100µg/mL	toluene	1	1mL
0049.20-10MG	6-Nitrobenzo[a]pyrene	297.32	[63041-90-7]	neat		1	10mg
2170.20-200-T	1-/3-Nitrobenzo[e]pyrene	297.32	[91259-16-4]/ [81340-58-1]	200µg/mL	toluene	1	1mL
2170.20-5MG	1-/3-Nitrobenzo[e]pyrene	297.32	[91259-16-4 /] [81340-58-1]	neat		1	5mg
1478.3-KIT	Nitrobenzo[a]pyrene neat Kit						Kit
3678.5-KIT	Nitrobenzo[a]- and nitrobenzo[e]pyrene solutions Kit						Kit

Aminopyrenes

1767.16-10MG	1-Aminopyrene	217.27	[1606-67-3]	neat		1	10mg
1786.16-10MG	2-Aminopyrene	217.27	[1732-23-6]	neat		1	10mg
1787.16-10MG	4-Aminopyrene	217.27	[17075-03-5]	neat		1	10mg
1768.16-10MG	1,3-Diaminopyrene	232.29	[92821-64-2]	neat		1	10mg
1769.16-5MG	1,6-Diaminopyrene	232.29	[14923-84-3]	neat		1	5mg
1770.16-5MG	1,8-Diaminopyrene	232.29	[30269-04-6]	neat		1	5mg
1788.20	6-Aminobenzo[a]pyrene	267.33	[7428-83-3]	Please inquire		1	10mg
1789.20	1-Aminobenzo[e]pyrene	267.33		Please inquire			
1790.20	3-Aminobenzo[e]pyrene	267.33	[120014-98-4]	Please inquire			
1909.6-KIT	Aminopyrene-/ Aminobenzopyrene Kit (Not including 1788,20-1790.20)						Kit

Chrysenes



C0-C1 Chrysenes

0212.18-200-T	Chrysene	228.30	[218-01-9]	200µg/mL	toluene	1	1mL
0212.18-10MG	Chrysene	228.30	[218-01-9]	neat		1	10mg
0292.19-200-T	1-Methylchrysene	242.32	[3351-28-8]	200µg/mL	toluene	1	1mL
0293.19-200-T	2-Methylchrysene	242.32	[3351-32-4]	200µg/mL	toluene	1	1mL
0294.19-200-T	3-Methylchrysene	242.32	[3351-31-3]	200µg/mL	toluene	1	1mL
0295.19-200-T	4-Methylchrysene	242.32	[3351-30-2]	200µg/mL	toluene	1	1mL
0296.19-200-T	5-Methylchrysene	242.32	[3697-24-3]	200µg/mL	toluene	1	1mL
0297.19-200-T	6-Methylchrysene	242.32	[1705-85-7]	200µg/mL	toluene	1	1mL
1035.7-KIT	C0-C1 Chrysene Kit						Kit

C2+ Chrysenes

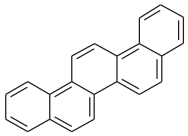
1508.20-K-T	6-Ethylchrysene	256.35	[2732-58-3]	1000µg/mL	toluene	1	1mL
2221.21-K-IO	1,3,6-Trimethylchrysene	270.38		1000µg/mL	isooctane	1	1mL
1700.21-K-T	6-n-Propylchrysene	270.38	[6910-41-4]	1000µg/mL	toluene	1	1mL
1701.22-K-T	6-n-Butylchrysene	284.40	[6901-71-9]	1000µg/mL	toluene	1	1mL
3733.4-KIT	C2+ Chrysene Kit						Kit

Benzochrysenes

0215.22 **Picene**

Benzo[a]chrysene

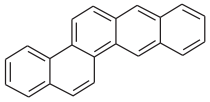
[213-46-7] MW 278.36



0215.22-2MG	neat, 1x2mg
0215.22-100-T	100µg/mL toluene, 1x1mL

0214.22 **Benzo[b]chrysene**

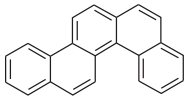
[214-17-5] MW 278.36



0214.22-200-T	200µg/mL toluene, 1x1mL

1036.22 **Benzo[c]chrysene**

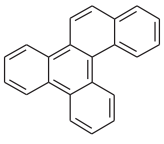
[194-69-4] MW 278.36



1036.22-200-T	200µg/mL toluene, 1x1mL

0213.22 **Benzo[g]chrysene**

[196-78-1] MW 278.36

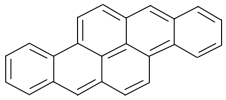


0213.22-200-T	200µg/mL toluene, 1x1mL
0213.22-10MG	neat, 1x10mg

0242.24 **Dibenzo[b,def]chrysene**

Dibenzo[a,h]pyrene

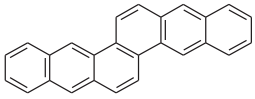
[189-64-0] MW 302.38



0242.24-200-T	200µg/mL toluene, 1x1mL
0242.24-10MG	neat, 1x10mg

0030.26 **Dibenzo[b,k]chrysene**

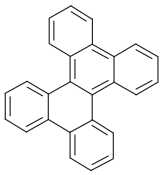
[217-54-9] MW 328.42



0030.26-200-T	200µg/mL toluene, 1x1mL
0030.26-5MG	neat, 1x5mg

0216.26 **Dibenzo[g,p]chrysene**

[191-68-4] MW 328.42



0216.26-200-T	200µg/mL toluene, 1x1mL
0216.26-10UG	neat, 1x10µg

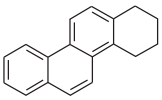
1043.7 **Benzochrysene Kit**

1043.7-KIT	Kit

Other chrysenes

2604.18 **1,2,3,4-Tetrahydrochrysene**

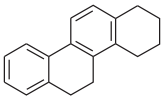
[2091-90-9] MW 232.33



2604.18-10UG neat, 1x10μg

2605.18 **1,2,3,4,5,6-Hexahydrochrysene**

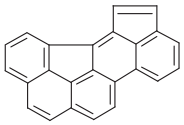
[2091-91-0] MW 234.34



2605.18-200-T 200μg/mL toluene, 1x1mL

2569.24 **Cyclopent[hi]indeno [4,3,2,1-cdef]chrysene**

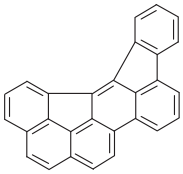
171877-64-8 MW 300.36



2569.24-10UG neat, 1x10μg

2578.28 **Diindeno [4,3,2,1-cdef;1',2',3'-hi]chrysene**

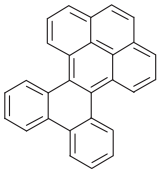
[169331-76-4] MW 350.42



2578.28-5UG neat, 1x5μg

2577.28 **Benzo[p]naphtho [1,8,7-ghi]chrysene**

[385-14-8] MW 352.44



2577.28-10UG neat, 1x10μg

Hydroxychrysenes

1492.18-10MG	1-Hydroxychrysene	244.30	[63019-38-5]	neat		1	10mg
1680.18-10MG	2-Hydroxychrysene	244.30	[65945-06-4]	neat		1	10mg
1493.18-10MG	3-Hydroxychrysene	244.30	[63019-39-6]	neat		1	10mg
1736.18-10MG	4-Hydroxychrysene	244.30	[63019-40-9]	neat		1	10mg
1324.18-10UG	Chrysene-trans-1,2-dihydrodiol	262.31	[64920-31-6]	neat		1	10µg
1325.18-10UG	Chrysene-trans-3,4-dihydrodiol	262.31	[64920-32-7]	neat		1	10µg
1326.18-10UG	Chrysene-trans-5,6-dihydrodiol	262.31	[56183-24-5]	neat		1	10µg

Methoxychrysenes

1629.19-10MG	1-Methoxychrysene	258.32	[63020-57-5]	neat		1	10mg
1709.19-10MG	2-Methoxychrysene	258.32	[63020-58-6]	neat		1	10mg
1630.19-10MG	3-Methoxychrysene	258.32	[36288-19-4]	neat		1	10mg
1710.19-10MG	4-Methoxychrysene	258.32	[63020-59-7]	neat		1	10mg
1902.4-KIT	Methoxychrysenes solution Kit						Kit

Ketochrysenes

0011.18-10MG	1,4-Chrysenequinone	258.28	[100900-16-1]	neat		1	10mg
0019.18-10MG	5,6-Chrysenequinone	258.28	[2051-10-7]	neat		1	10mg

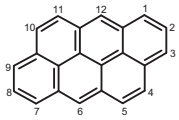
Nitrochrysenes

0017.18-100-T	6-Nitrochrysene	273.29	[7496-02-8]	100µg/mL	toluene	1	1mL
0017.18-10MG	6-Nitrochrysene	273.29	[7496-02-8]	neat		1	10mg

Aminochrysenes

1794.18-10MG	2-Aminochrysene	243.31	[789-47-9]	neat		1	10mg
1785.18-10MG	6-Aminochrysene	243.31	[2642-98-0]	neat		1	10mg

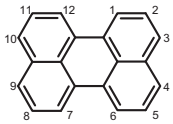
Anthanthrenes



0256.22-200-T	Anthanthrene	276.34	[191-26-4]	200µg/mL	toluene	1	1mL
0256.22-10MG	Anthanthrene	276.34	[191-26-4]	neat		1	10mg
0307.23-200-T	6-Methylanthanthrene	290.37	[31927-64-7]	200µg/mL	toluene	1	1mL
0307.23-10MG	6-Methylanthanthrene	290.37	[31927-64-7]	neat		1	10mg
0050.22-100-T	6-Nitroanthanthrene	321.34	[111438-94-9]	100µg/mL	toluene	1	1mL
0050.22-10MG	6-Nitroanthanthrene	321.34	[111438-94-9]	neat		1	10mg
0257.30-10MG	Pyranthrene	376.46	[191-13-9]	neat		1	10mg
0258.36-10MG	1.2,3.4,5.6,10.11-Tetrabenzanthanthrene	450.54	[188-00-1]	neat		1	10mg

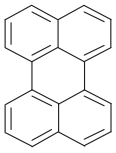
Perylenes

Perylene and alkylpyrenes



0220.20 **Perylene**

[198-55-0] MW 252.32



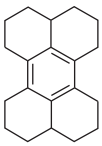
0220.20-200-T 200μg/mL toluene, 1x1mL

0220.20-10MG neat, 1x10mg

2609.20 **1,2,3,3a,4,5,6,7,8,9,9a,10,11,12-Tetradecahydroperylene**

NEW

[7594-86-7] MW 266.43



2609.20-200-T 200μg/mL toluene, 1x1mL

2609.20-10MG neat, 1x10mg

0222.22 **Benzo[ghi]perylene**

[191-24-2] MW 276.34

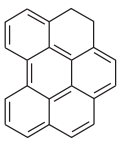
0222.22-200-T 200μg/mL toluene, 1x1mL

0222.22-10MG neat, 1x10mg

2610.22 **3,4-Dihydrobenzo[ghi]perylene**

NEW

[16310-65-9] MW 278.36

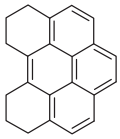


2610.22-10UG neat, 1x10μg

2611.22 **5,6,7,8,9,10-Hexahydrobenz[ghi]perylene**

NEW

[35281-51-7] MW 282.39



Please inquire

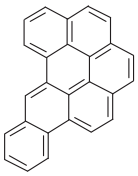
0221.24 **Benzo[b]perylene**

[197-70-6] MW 302.38

0221.24-200-T 200μg/mL toluene, 1x1mL

0224.26 **Dibenzo[b,ghi]perylene**

[5869-30-7] MW 326.40



0224.26-200-T 200μg/mL toluene, 1x1mL

0223.26 **Dibenzo[e,ghi]perylene**

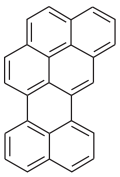
[190-95-4] MW 326.40

0223.26-200-T 200μg/mL toluene, 1x1mL

2572.26 **Naphtho[8,1,2-bcd]perylene**

NEW

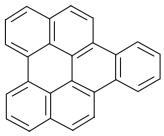
[88-89-6] MW 326.40



2572.26-200-T 200μg/mL toluene, 1x1mL

0225.26 **Naphtho[1,2,3,4-ghi]perylene**

[190-84-1] MW 326.40



0225.26-200-T 200µg/mL toluene, 1x1mL

2575.26 **1-n-Hexylperylene**

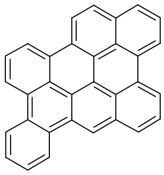
[143076-98-6] MW 336.48

2575.26-200-T 200µg/mL toluene, 1x1mL

2588.32 **Dibenzo[cd,n]naphtho [3,2,1,8-pqra]perylene**

NEW

[109278-09-3] MW 400.48

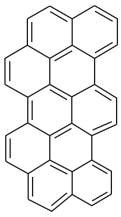


2588.32-10UG neat, 1x10µg

2592.34 **Benzo[pgr]dinaphtho [8,1,2-bcd:2',1',8'-lmn]perylene**

NEW

[188-11-4] MW 424.51



2592.34-10UG neat, 1x10µg

1190.12 **Perylene solutions Kit**

(Not including 2611.22)

1190.12-KIT Kit

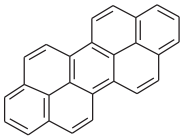
Nitro- / Aminoperylenes

0045.20-100-T	1-Nitroperylene	297.32	[35337-20-3]	100µg/mL	toluene	1	1mL
0045.20-10MG	1-Nitroperylene	297.32	[35337-20-3]	neat		1	10mg
0046.20-100-T	3-Nitroperylene	297.32	[20589-63-3]	100µg/mL	toluene	1	1mL
0046.20-10MG	3-Nitroperylene	297.32	[20589-63-3]	neat		1	10mg
1791.20-100UG	1-Aminoperylene	267.33	[35337-21-4]	neat		1	100µg
1792.20-100UG	3-Aminoperylene	267.33	[20492-13-1]	neat		1	100µg
1482.2-KIT	Nitroperylene Kit						Kit
3078.4-KIT	Nitro-/Aminoperylene Kit						Kit

Peropyrenes

0250.26 **Peropyrene**

[188-96-5] MW 326.40

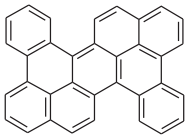


0250.26-200-T 200μg/mL toluene, 1x1mL

0250.26-10MG neat, 1x10mg

0251.34 **Dibenzo[h,s]peropyrene**

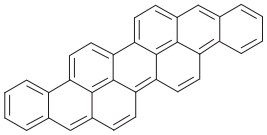
[191-53-7] MW 426.52



0251.34-10MG neat, 1x10mg

0253.34 **Isoviolanthrene**

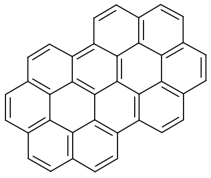
[4430-29-9] MW 426.54



0253.34-10MG neat, 1x10mg

0255.38 **Circobiphenyl**

[41163-25-1] MW 472.55

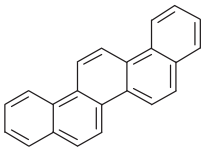


0255.38-10MG neat, 1x10mg

Picenes

0215.22 **Picene**

[213-46-7] MW 278.36



0215.22-50-T 50μg/mL toluene, 1x1mL

2566.23 **5-Methylpicene**

[7499-40-3] MW 292.38

2566.23-10UG neat, 1x10μg

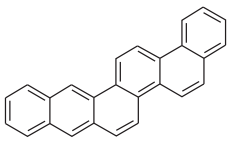
2152.24 **2,9-Dimethylpicene**

[1679-02-3] MW 306.41

2152.24-100-T 100μg/mL toluene, 1x1mL

2573.26 **Benzo[b]picene**

[217-42-5] MW 328.42



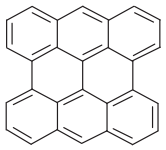
2573.26-100-T 100μg/mL toluene, 1x1mL

Bisanthenes

2219.28 **Bisanthene**

(Phenanthro[1,10,9,8-opqra]perylene)

[190-39-6] MW 354.46

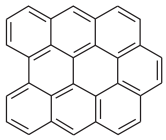


2219.28-10MG neat, 1x10mg

0061.30 **Dibenzo[bc,ef]coronene**

('1.14-Benzobisanthene)

[190-31-8] MW 374.45

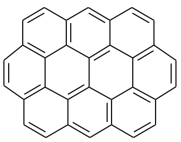


0061.30-100-T 100μg/mL toluene, 1x1mL

0061.30-10MG neat, 1x10mg

0022.32 **Ovalene**

[190-26-1] MW 398.47

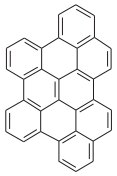


0022.32-10MG neat, 1x10mg

0033.34 **Dibenzo[cd,pg]bisanthene**

('3.4,11.12-Dibenzobisanthene)

[187-94-0] MW 424.51

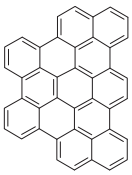


0033.34-10UG neat, 1x10μg

0033.34-10MG neat, 1x10mg

0062.42 **1.14-Benzodinaphtho[1".7",2.4], [7"'.1"',11.13]bisanthene**

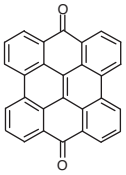
[362052-01-5] MW 522.61



0062.42-10MG neat, 1x10mg

2613.28 **Bisanthone**

[475-64-9] MW 380.41



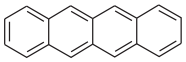
2613.28-100-T 100μg/mL toluene, 1x1mL

Acenes and phenes

0206.18 **Tetracene**

Naphthacene

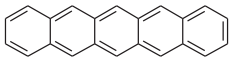
[92-24-0] MW 228.30



0206.18-10MG neat, 1x10mg

0210.22 **Pentacene**

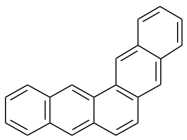
[135-48-8] MW 278.36



0210.22-10MG neat, 1x10mg

0029.22 **Pentaphene**

[222-93-5] MW 278.36

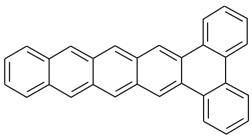


0029.22-200-T 200μg/mL toluene, 1x1mL

0029.22-5MG neat, 1x5mg

2585.30 **Dibenz[a,c]pentacene**

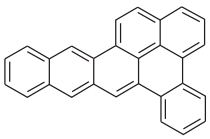
216-08-0 MW 378.48



2585.30-10UG neat, 1x10μg

2580.28 **Benzo[a]naphtha [8,1,2-cde]naphthacene**

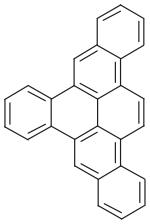
[192-70-1] MW 352.44



2580.28-100-T 100μg/mL toluene, 1x1mL

2581.28 **Dibenzo[h,rst]pentaphene**

[192-47-2] MW 352.44

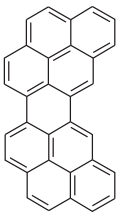


2581.28-200-T 200μg/mL toluene, 1x1mL

2581.28-5MG neat, 1x5mg

2589.32 **"Dinaphtho [2,1,8,7-defg;2',1',8',7'-ijkl] pentaphene"**

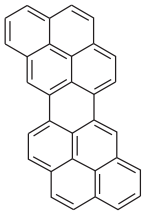
[188-90-9] MW 400.48



Please inquire

2587.32 **"Dinaphtho [2,1,8,7-defg;2',1',8',7'-opqr]pentacene"**

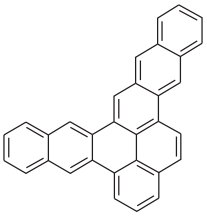
[188-91-0] MW 400.48



2587.32-10UG neat, 1x10μg

2591.32 **Naphtho[8,1,2-hij]hexaphene**

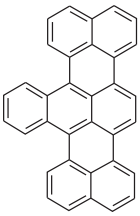
[196-27-0] MW 402.50



Please inquire

2593.34 **Tetrabenzo [de,h,kl,rst]pentaphene**

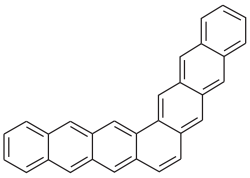
[188-13-6] MW 426.52



Please inquire

2584.30 **Heptaphene**

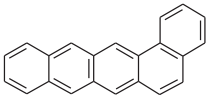
[222-75-3] MW 378.48



2584.30-5UG neat, 1x5μg

0207.22 **Benzo[a]tetracene**

[226-88-0] MW 278.36



0207.22-200-T 200μg/mL toluene, 1x1mL

0207.22-5MG neat, 1x5mg

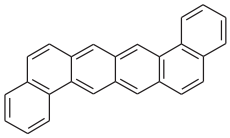
2574.26 **Benzo[a]pentacene**

[239-98-5] MW 328.42

2574.26-100-T 100μg/mL toluene, 1x1mL

0208.26 **Dibenzo[a,j]tetracene**

[227-04-3] MW 328.42



0208.26-10MG neat, 1x10mg

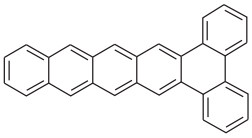
0209.26 **Dibenzo[a,l]tetracene**

[226-86-8] MW 328.42

0209.26-10MG neat, 1x10mg

2585.30 **Dibenzo[a,c]pentacene**

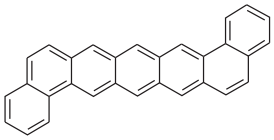
[216-08-0] MW 378.48



2585.30-200-T 200μg/mL toluene, 1x1mL

1725.30 **Dibenzo[a,l]pentacene ('1,2:8,9-Dibenzopentacene)**

[227-09-8] MW 378.48



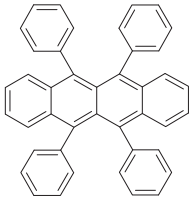
1725.30-200-T 200μg/mL toluene, 1x1mL

1725.30-10MG neat, 1x10mg

1609.42 **Rubrene**

5,6,11,12-Tetraphenylnaphthacene

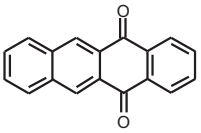
[517-51-1] MW 532.69



1609.42-10MG neat, 1x10mg

3566.18 **5,12-Naphthacenequinone**

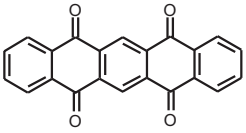
[1090-13-7] MW 258.27



3566.18-10MG neat, 1x10mg

3567.22 **5,7,12,14-Pentacenetetrone**

[23912-79-0] MW 338.31

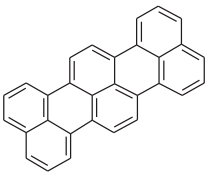


3567.22-10MG neat, 1x10mg

Terrylenes

0034.30 **Terrylene**

[188-72-7] MW 376.46

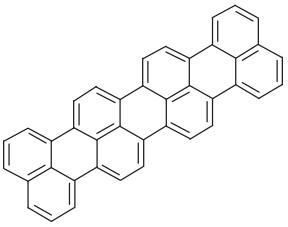


0034.30-10UG neat, 1x10μg

0034.30-10MG neat, 1x10mg

0026.40 **Quaterrylene**

[188-73-8] MW 500.61

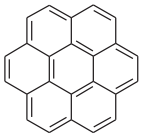


0026.40-10UG neat, 1x10μg

Coronenes

Coronene and benzo/naphthocoronenes

0226.24 **Coronene**
[191-07-1] MW 300.36



0226.24-100-T 100µg/mL toluene, 1x1mL
0226.24-10MG neat, 1x10mg

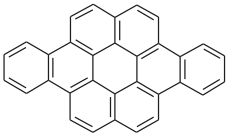
0303.25 **1-Methylcoronene**
[13119-86-3] MW 314.39

0303.25-200-T 200µg/mL toluene, 1x1mL
0303.25-10MG neat, 1x10mg

0227.28 **Benzo[a]coronene**
[190-70-5] MW 350.42

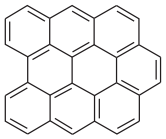
0227.28-10MG neat, 1x10mg

0229.32 **Dibenzo[a,j]coronene**
[190-72-7] MW 400.48



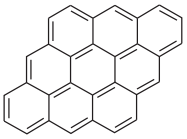
0229.32-200-T 200µg/mL toluene, 1x1mL
0229.32-5MG neat, 1x5mg

0061.30 **Dibenzo[bc,ef]coronene**
(1.14-Benzobisanthene)
[190-31-8] MW 374.45



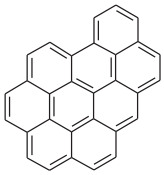
0061.30-5MG neat, 1x5mg

2583.30 **Dibenz[bc,kl]coronene**
[190-55-6] MW 374.45



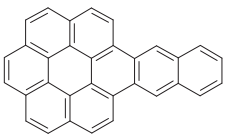
Please inquire

0232.30 **Naphtho[8,1,2-abc]coronene**
(Naphtho[2',8',2,4]coronene)
[6596-38-9] MW 374.45



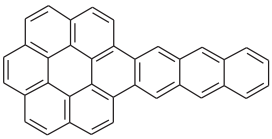
0232.30-1ML neat, 1x1mL
0232.30-10MG neat, 1x10mg

0230.32 **Naphtho[2,3-a]coronene**
[190-74-9] MW 400.48



0230.32-200-T 200µg/mL toluene, 1x1mL
0230.32-5MG neat, 1x5mg

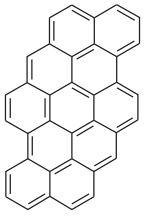
0231.36 **Anthraceno[2.3-a]coronene**
[5869-17-0] MW 450.54



0231.36-10MG neat, 1x10mg

2594.36 **Dinaphtho-[8,1,2-abc;8',1',2'-jkl]coronene**

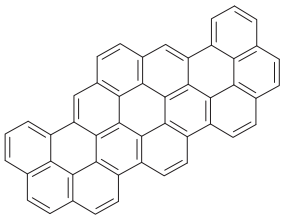
[190-47-6] MW 448.53



2594.36-10UG neat, 1x10μg

2597.48 **Dibenzo[lmbrs]naphtha-[3,2,1,8,7-defgh]phenanthro-[3,4,5-yzab]pyranthrene**

[362600-03-1] MW 596.69



2597.48-100-T 100μg/mL toluene, 1x1mL

2598.48 **Dicoronylene (mixture w/Coronylovalene)**

[98570-53-7] MW 596.69

2598.48-10MG neat, 1x10mg

2598.48-100MG neat, 1x100mg

2599.56 **Coronylovalene (mixture w/Dicoronylene)**

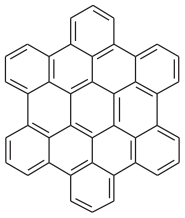
[143066-75-5] MW 694.80

2599.56-10MG neat, 1x10mg

2599.56-100MG neat, 1x100mg

0233.42 **1.12,2.3,4.5,6.7,8.9,10.11-Hexabenzocoronene**

[190-24-9] MW 522.61

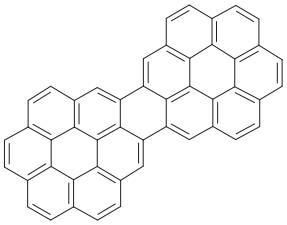


0233.42-200-T 200μg/mL toluene, 1x1mL

0233.42-5MG neat, 1x5mg

0234.48 **Dicoronylene**

[98570-53-7] MW 596.69

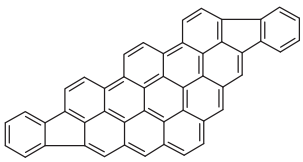


0234.48-200-T 200μg/mL toluene, 1x1mL

0234.48-10MG neat, 1x10mg

0283.48 **Difluorantheno-[3.5,4.6],[4".6",9.11]coronene**

[362051-19-2] MW 596.69

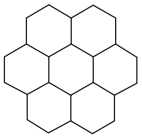


0283.48-10MG neat, 1x10mg

2612.24 **Tetracosahydrocoronene**

Perhydrocoronene

[54171-94-7] MW 324.55



2612.24-200-T 200μg/mL toluene, 1x1mL

2612.24-10MG neat, 1x10mg

Nitrocoronenes

0047.24 **1-Nitrocoronene**

[81316-84-9] MW 345.36

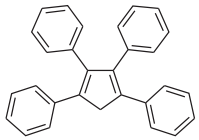
0047.24-100-T 100µg/mL toluene, 1x1mL

0047.24-10MG neat, 1x10mg

Other PAHs

1611.29 **1,2,3,4-Tetraphenyl-1,3-cyclopentadiene**

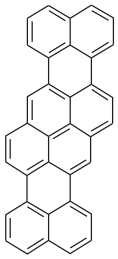
[15570-45-3] MW 370.50



1611.29-K-T 1000µg/mL toluene, 1x1mL

2595.36 **Dibenzo[lm,yz]pyranthrene**

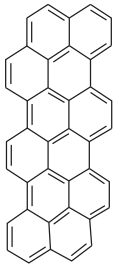
[191-06-0] MW 450.54



Please inquire

2596.40 **Tetrabenzo[def,lm,grs,yz]-pyranthrene**

[190-65-8] MW 498.59

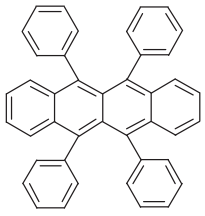


2596.40-10UG neat, 1x10µg

1609.42 **Rubrene**

(5,6,11,12-Tetraphenylnaphthacene)

[517-51-1] MW 532.69

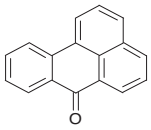


1609.42-200-T 200µg/mL toluene, 1x1mL

Other ketoPAHs

1684.17 **Benzanthrone**

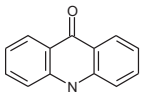
[82-05-3] MW 230.26



1684.17-10MG neat, 1x10mg

1730.13 **9(10H)-Acridone**

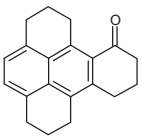
[578-95-0] MW195.22



1730.13-10MG neat, 1x10mg

1731.20 **1,2,3,6,7,8,11,12-Octahydrobenzo[e]pyren-9(10H)-one**

[68151-08-6] MW 276.38

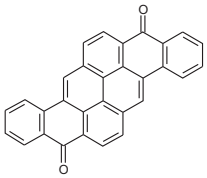


1731.20-10MG neat, 1x10mg

1732.30 **8,16-Pyranthrenedione**

Pyranthrone

[128-70-1] MW 406.44

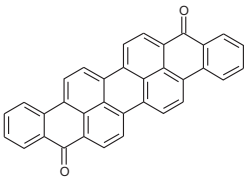


1732.30-200-T 200µg/mL toluene, 1x1mL

1732.30-10MG neat, 1x10mg

2615.34 **Isoviolanthrone**

[128-64-3] MW 456.51

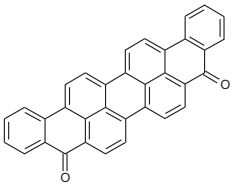


2615.34-200-T 200µg/mL toluene, 1x1mL

2615.34-10MG neat, 1x10mg

2614.34 **Violanthrone**

[116-71-2] MW 456.51



2614.34-200-T 200µg/mL toluene, 1x1mL

2614.34-10MG neat, 1x10mg

3816.6 **Other KetoPAH Kit**

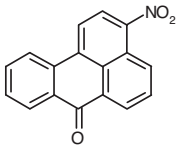
3816.6-KIT Kit

Other nitroPAHs

1127.17 **3-Nitrobenzanthrone**

NBA

[17117-34-9] MW 275.27



1127.17-100-T 100µg/mL toluene, 1x1mL

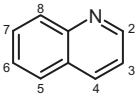
1127.17-10MG neat, 1x10mg

PANHs (Nitrogen-heterocyclic PAHs)

Quinolines and benzoquinolines

NEW

C0-C1 Quinolines



3679.9-K-IO	Quinoline		129.16	[91-22-5]	1000µg/mL	isooctane	1	1mL
3574.9-K-IO	Decahydroquinoline		139.24	[2051-28-7]	1000µg/mL	isooctane	1	1mL
3573.10-K-IO	2-Methylquinoline	Quinaldine	143.19	[91-63-4]	1000µg/mL	isooctane	1	1mL
3568.10-K-IO	3-Methylquinoline		143.19	[612-58-8]	1000µg/mL	isooctane	1	1mL
3569.10-K-IO	4-Methylquinoline	Lepidine	143.19	[491-35-0]	1000µg/mL	isooctane	1	1mL
3570.10-K-IO	6-Methylquinoline	p-Toluquinoline	143.19	[91-62-3]	1000µg/mL	isooctane	1	1mL
3571.10-K-IO	7-Methylquinoline		143.19	[612-60-2]	1000µg/mL	isooctane	1	1mL
3572.10-K-IO	8-Methylquinoline	o-Toluquinoline	143.19	[611-32-5]	1000µg/mL	isooctane	1	1mL
3680.8-KIT	C0-C1Quinoline Kit							Kit

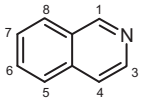
C2-C3 Quinolines

3079.11-K-IO	2,3-Dimethylquinoline	157.21	[1721-89-7]	1000µg/mL	isooctane	1	1mL
3080.11-K-IO	2,4-Dimethylquinoline	157.21	[1198-37-4]	1000µg/mL	isooctane	1	1mL
3081.11-K-IO	2,6-Dimethylquinoline	157.21	[877-43-0]	1000µg/mL	isooctane	1	1mL
3082.11-K-IO	2,7-Dimethylquinoline	157.21	[93-37-8]	1000µg/mL	isooctane	1	1mL
3083.11-K-IO	2,8-Dimethylquinoline	157.21	[1463-17-8]	1000µg/mL	isooctane	1	1mL
3084.11-K-IO	4,6-Dimethylquinoline	157.21	[826-77-7]	1000µg/mL	isooctane	1	1mL
3575.12-K-IO	4,6,8-Trimethylquinoline	174.24	[88565-88-2]	1000µg/mL	isooctane	1	1mL
3681.7-KIT	C2-C3 Quinoline Kit						Kit

Other quinolines

2907.10-10MG	3,4-Dihydro-6-methyl-2(1H)-quinolinone isomer mixture (unidentified isomers)	161.21	[20150-83-8]	neat		1	10mg
2254.10-K-IO	4-Methyl-8-nitroquinoline	188.19	[2801-29-8]	1000µg/mL	isooctane	1	1mL

Isoquinolines



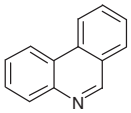
3682.9-K-IO	Isoquinoline	129.16	[119-65-3]	1000µg/mL	isooctane	1	1mL
3576.10-K-IO	1-Methylisoquinoline	143.19	[1721-93-3]	1000µg/mL	isooctane	1	1mL
3577.10-K-IO	3-Methylisoquinoline	143.19	[1125-80-0]	1000µg/mL	isooctane	1	1mL
3578.9-10MG	5-Hydroxyisoquinoline	145.16	[2439-04-5]	neat		1	10mg
3683.4-KIT	Isoquinoline Kit						Kit

Benzoquinolines

1745.13 **Benzo[c]quinoline**

3,4-Benzoquinoline

[229-87-8] MW 179.22

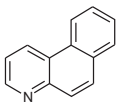


1745.13-K-T 1000µg/mL toluene, 1x1mL

1743.13 **Benzo[f]quinoline**

5,6-Benzoquinoline

[85-02-9] MW 179.22

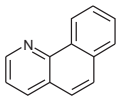


1743.13-K-T 1000µg/mL toluene, 1x1mL

1744.13 **Benzo[h]quinoline**

7,8-Benzoquinoline

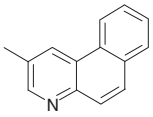
[230-27-3] MW 179.22



1744.13-200-T 200µg/mL toluene, 1x1mL

3579.14 **3-Methylbenzo[f]quinoline**

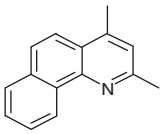
[85-06-3] MW 193.24



3579.14-100-IO 100µg/mL isooctane, 1x1mL

2714.15 **2,4-Dimethylbenzo[h]quinoline**

[605-67-4] MW 207.28

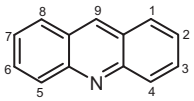


2714.15-100-IO 100µg/mL isooctane, 1x1mL

1905.5 **Benzoquinoline Kit**

1905.5-KIT Kit

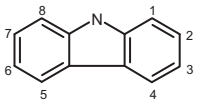
Acridines



0372.13-200-IO	Acridine	179.22	[266-94-6]	200µg/mL	isooctane	1	1mL
1510.14-200-IO	2-Methylacridine	193.25	[613-15-0]	200µg/mL	isooctane	1	1mL
0373.14-200-IO	9-Methylacridine	193.25	[611-64-3]	200µg/mL	isooctane	1	1mL
0311.17-200-IO	Benz[a]acridine	229.28	[225-11-6]	200µg/mL	isooctane	1	1mL
0310.17-200-T	Benz[c]acridine	229.28	[225-51-4]	200µg/mL	toluene	1	1mL
0374.19-200-T	7,9-Dimethylbenz[c]acridine	257.34	[963-89-3]	200µg/mL	toluene	1	1mL
1093.19-K-T	7,10-Dimethylbenz[c]acridine	257.34	[2381-40-0]	1000µg/mL	toluene	1	1mL
0312.21-200-T	Dibenz[a,c]acridine	279.34	[215-62-3]	200µg/mL	toluene	1	1mL
0313.21-200-T	Dibenz[a,h]acridine	279.34	[226-36-8]	200µg/mL	toluene	1	1mL
0314.21-200-T	Dibenz[a,i]acridine	279.34	[226-92-6]	200µg/mL	toluene	1	1mL
0315.21-200-T	Dibenz[a,j]acridine	279.34	[224-42-0]	200µg/mL	toluene	1	1mL
0316.21-200-T	Dibenz[c,h]acridine	279.34	[224-53-3]	200µg/mL	toluene	1	1mL
0105.12-KIT	Acridine / Benzacridine Kit						Kit
1771.13-K-IO	9-Aminoacridine hemihydrate	194.24	[90-45-9]	1000µg/mL	isooctane	1	1mL

Carbazoles

Carbazole and alkylcarbazoles

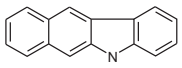


0378.12-K-T	Carbazole	9H-Carbazole	167.21	[86-74-8]	1000µg/mL	toluene	1	1mL
0378.12-10MG	Carbazole	9H-Carbazole	167.21	[86-74-8]	neat		1	10mg
0376.12-K-T	1,2,3,4-Tetrahydrocarbazole		171.24	[942-01-8]	1000µg/mL	toluene	1	1mL
1383.13-200-T	2-Methylcarbazole	2-Me-9H-Carbazole	181.24	[3652-91-3]	200µg/mL	toluene	1	1mL
1384.13-200-T	3-Methylcarbazole	3-Me-9H-Carbazole	181.24	[4630-20-0]	200µg/mL	toluene	1	1mL
0379.13-K-T	9-Methylcarbazole	9-Me-9H-Carbazole	181.24	[1484-12-4]	1000µg/mL	toluene	1	1mL
1207.14-K-T	3-Ethylcarbazole	3-Et-9H-Carbazole	195.27	[5599-49-5]	1000µg/mL	toluene	1	1mL
0380.14-K-T	9-Ethylcarbazole	9-Et-9H-Carbazole	195.27	[86-28-2]	1000µg/mL	toluene	1	1mL
0375.15-K-T	9-Isopropylcarbazole	9-Isopropyl-9H-Carbazole	209.29	[1484-09-9]	1000µg/mL	toluene	1	1mL
1614.20-K-T	9-n-Octylcarbazole	9-n-Octyl-9H-Carbazole	279.43	[4041-19-4]	1000µg/mL	toluene	1	1mL
0102.9-KIT	Carbazole Kit							Kit

Benzocarbazoles

1209.16 **5H-Benzo[b]carbazole**

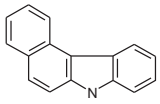
[243-28-7] MW 217.27



1209.16-200-T 200μg/mL toluene, 1x1mL

0317.16 **7H-Benzo[c]carbazole**

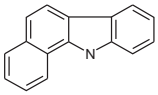
[205-25-4] MW 217.27



0317.16-200-T 200μg/mL toluene, 1x1mL

0320.16 **11H-Benzo[a]carbazole**

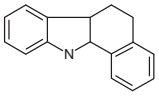
[239-01-0] MW 217.27



0320.16-200-T 200μg/mL toluene, 1x1mL

1292.16 **5,6,6a,11a-Tetrahydro-11H-benzo[a]carbazole**

[112901-06-1] MW 221.30



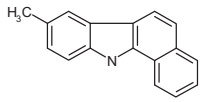
1292.16-200-T 200μg/mL toluene, 1x1mL

0104.4 **Benzocarbazole Kit**

0104.4-KIT Kit

1214.17 **8-Methyl-11(H)-benzo[a]carbazole**

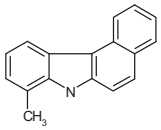
[21064-33-5] MW 231.30



1214.17-200-T 200µg/mL toluene, 1x1mL

1217.17 **8-Methyl-7(H)-benzo[c]carbazole**

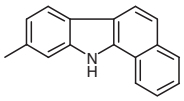
[117044-44-7] MW 231.30



1217.17-200-IO 200µg/mL isooctane, 1x1mL

1216.17 **9-Methyl-11(H)-benzo[a]carbazole**

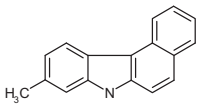
MW 231.30



1216.17-200-T 200µg/mL toluene, 1x1mL

1212.17 **9-Methyl-7(H)-benzo[c]carbazole**

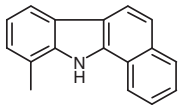
[117043-89-7] MW 231.30



1212.17-200-IO 200µg/mL isooctane, 1x1mL

1211.17 **10-Methyl-11(H)-benzo[a]carbazole**

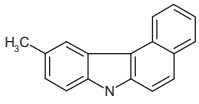
MW 231.30



1211.17-200-T 200µg/mL toluene, 1x1mL

1215.17 **10-Methyl-7(H)-benzo[c]carbazole**

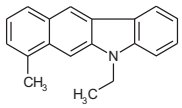
[21064-50-6] MW 231.30



1215.17-200-IO 200µg/mL isooctane, 1x1mL

1213.19 **5-Ethyl-7-methylbenzo[b]carbazole**

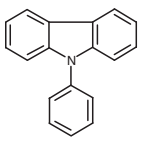
[4133-22-6] MW 259.35



1213.19-200-T 200µg/mL toluene, 1x1mL

0377.18 **9-Phenylcarbazole**

[1150-62-5] MW 243.31



0377.18-K-T 1000µg/mL toluene, 1x1mL

1210.8 **Alkyl/phenylbenzocarbazoles Kit**

1210.8-KIT Kit

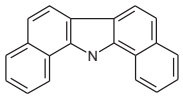
1385.12 **Benzocarbazole and alkyl/phenyl benzocarbazole Kit**

1385.12-KIT Kit

Dibenzocarbazoles

0318.20 **13(H)-Dibenzo[a,i]carbazole**

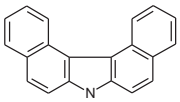
[239-64-5] MW 267.33



0318.20-200-T 200µg/mL toluene, 1x1mL

0319.20 **7H-Dibenzo[c,g]carbazole**

[194-59-2] MW 267.33



0319.20-200-T 200µg/mL toluene, 1x1mL

1390.2 **Dibenzocarbazole Kit**

1390.2-KIT Kit

Hydroxycarbazoles

1588.12 **2-Hydroxycarbazole**

[86-79-3] MW 183.21

1588.12-100-IO 100µg/mL isooctane, 1x1mL

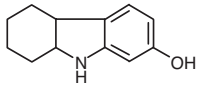
1590.12 **4-Hydroxycarbazole**

[52602-39-8] MW 183.21

1590.12-100-IO 100µg/mL isooctane, 1x1mL

1587.12 **2-Hydroxy-5,6,7,8-tetrahydrocarbazole**

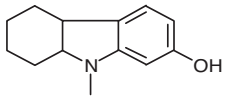
[13314-79-9] MW 189.26



1587.12-100-IO 100µg/mL isooctane, 1x1mL

1589.13 **2-Hydroxy-5,6,7,8-tetrahydro-9-methylcarbazole**

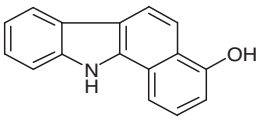
MW 203.29



1589.13-100-IO 100µg/mL isooctane, 1x1mL

1593.16 **4-Hydroxy-11H-indolo[2,3-f]naphthalene**

[23682-01-1] MW 233.27

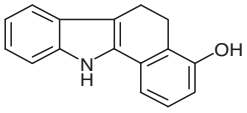


1593.16-100-IO 100µg/mL isooctane, 1x1mL

1591.16

5,6-Dihydro-4-hydroxy-11H-indolo[2,3-f]naphthalene

MW 235.29

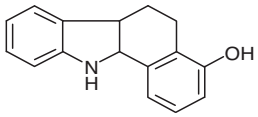


1591.16-100-IO 100µg/mL isooctane, 1x1mL

1594.16

4-Hydroxy-5,6,6a,11a-tetrahydro-11H-benzo[a]carbazole

MW 237.30

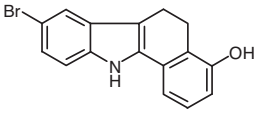


1594.16-100-IO 100µg/mL isooctane, 1x1mL

1592.16

8-Bromo-5,6-dihydro-4-hydroxy-11H-indolo [2,3-f]napththalene

MW314.18



1592.16-100-IO 100µg/mL isooctane, 1x1mL

1904.8

Hydroxycarbazole Kit

1904.8-KIT Kit

Other carbazoles

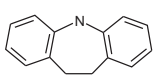
1775.12-K-IO	3,6-Diaminocarbazole	197.24	[86-71-5]	1000µg/mL	isooctane	1	1mL
1772.14-K-IO	3-Amino-9-ethylcarbazole	210.28	[132-32-1]	1000µg/mL	isooctane	1	1mL
1741.15-K-T	N-Ethylcarbazole-3-carboxaldehyde	223.28	[7570-45-8]	1000µg/mL	toluene	1	1mL
3580.14-K-T	9-Ethyl-3-nitrocarbazole	240.26	[86-20-4]	1000µg/mL	toluene	1	1mL

Dibenzazepines / porphines

1742.14

10,11-Dihydro-5H-dibenz[b,f] azepine

[494-19-9] MW 195.27

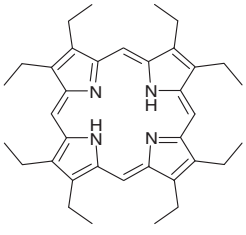


1742.14-K-IO 1000µg/mL isooctane, 1x1mL

1277.36

2,3,7,8,12,13,17,18-Octaethylporphine

[2683-82-1] MW 534.79



1277.36-100-AN 100µg/mL acetonitrile, 1x1mL

PASHs (Sulfur-heterocyclic PAHs)

Thiophenes

Thiophene and alkylthiophenes

0933.4-100MG	Thiophene	84.14	[110-02-1]	neat		1	100mg
0934.5-100MG	2-Methylthiophene	98.17	[554-14-3]	neat		1	100mg
0935.5-100MG	3-Methylthiophene	98.17	[616-44-4]	neat		1	100mg
2680.6-K-IO	2,3-Dimethylthiophene	112.19	[632-16-6]	1000µg/mL	isooctane	1	1mL
0358.6-10MG	2,4-Dimethylthiophene	112.19	[638-00-6]	neat		1	10mg
0937.6-100MG	2,5-Dimethylthiophene	112.19	[638-02-8]	neat		1	100mg
2693.6-K-IO	3,4-Dimethylthiophene	112.19	[632-15-5]	1000µg/mL	isooctane	1	1mL
0936.6-100MG	2-Ethylthiophene	112.19	[872-55-9]	neat		1	100mg
0359.6-100MG	3-Ethylthiophene	112.19	[1795-01-3]	neat		1	100mg
0450.7-10MG	2,3,5-Trimethylthiophene	126.22	[1795-04-6]	neat		1	10mg
3798.7-100MG	2-Ethyl-5-methylthiophene	126.22	[40323-88-4]	neat		1	100mg
0163.7-100MG	2-n-Propylthiophene	126.22	[1551-27-5]	neat		1	100mg
2173.7-100MG	3-n-Propylthiophene	126.22	[1518-75-0]	neat		1	100mg
3799.8	2,3,4,5-Tetramethylthiophene	140.25	[14503-51-6]	Please inquire		1	100mg
0363.8-100MG	2-n-Butylthiophene	140.25	[1455-20-5]	neat		1	100mg
1447.9-100MG	2-n-Amylthiophene	154.28	[4861-58-9]	neat		1	100mg
1514.10-K-IO	2-Phenylthiophene	160.24	[825-55-8]	1000µg/mL	isooctane	1	1mL
0360.10-K-IO	3-Phenylthiophene	160.24	[2404-87-7]	1000µg/mL	isooctane	1	1mL
1686.10-K-IO	2-n-Butyl-5-ethylthiophene	168.30	[54411-06-2]	1000µg/mL	isooctane	1	1mL
1685.10-K-IO	2-n-Hexylthiophene	168.30	[18794-77-9]	1000µg/mL	isooctane	1	1mL
0164.11-K-IO	3-n-Heptylthiophene	182.33	[65016-61-7]	1000µg/mL	isooctane	1	1mL
0137.12-K-IO	2-n-Octylthiophene	196.36	[880-36-4]	1000µg/mL	isooctane	1	1mL
0136.12-K-IO	3-n-Octylthiophene	196.36	[65016-62-8]	1000µg/mL	isooctane	1	1mL
1747.13-K-IO	3-n-Nonylthiophene	210.38	[65016-63-9]	1000µg/mL	isooctane	1	1mL
0361.14-K-IO	3-n-Decylthiophene	224.41	[65016-55-9]	1000µg/mL	isooctane	1	1mL
1748.15-K-IO	3-n-Undecylthiophene	238.44	[129607-86-9]	1000µg/mL	isooctane	1	1mL
1749.16-K-IO	3-n-Dodecylthiophene	252.47	[104934-52-3]	1000µg/mL	isooctane	1	1mL
3684.18-K-IO	3-n-Tetradecylthiophene	280.51	[110851-66-6]	1000µg/mL	isooctane	1	1mL
3685.20-K-IO	3-n-Hexadecylthiophene	308.57	[119269-24-8]	1000µg/mL	isooctane	1	1mL
0362.22-K-IO	3-n-Octadecylthiophene	336.63	[104934-54-5]	1000µg/mL	isooctane	1	1mL
0939.29-KIT	Thiophene Kit (Not including 3799.8)						Kit

Other thiophene

1831.4-1G	3-Chlorothiophene	118.59	[17249-80-8]	neat		1	1g
1830.4-1G	2-Bromothiophene	163.04	[1003-09-4]	neat		1	1g
2756.4-K-IO	3-Bromothiophene	163.04	[872-31-1]	1000µg/mL	isooctane	1	1mL

Benzothiophenes

C0-C1 Benzothiophenes (Benz[b]thiophenes, Thionaphthenes)

0938.8-K-IO	Benzothiophene	134.20	[95-15-8]	1000µg/mL	isooctane	1	1mL
0946.9-K-IO	2-Methylbenzothiophene	148.23	[1195-14-8]	1000µg/mL	isooctane	1	1mL
0947.9-K-IO	3-Methylbenzothiophene	148.23	[1455-18-1]	1000µg/mL	isooctane	1	1mL
0198.9-K-IO	4-Methylbenzothiophene	148.23	[14315-11-8]	1000µg/mL	isooctane	1	1mL
0356.9-K-IO	5-Methylbenzothiophene	148.23	[14315-14-1]	1000µg/mL	isooctane	1	1mL
0199.9-K-IO	6-Methylbenzothiophene	148.23	[16587-47-6]	1000µg/mL	isooctane	1	1mL
0951.9-K-IO	7-Methylbenzothiophene	148.23	[14315-15-2]	1000µg/mL	isooctane	1	1mL
0968.7-KIT	C0-C1 Benzothiophene Kit						Kit

C2 Benzothiophenes

0952.10-K-IO	2,3-Dimethylbenzothiophene	162.26	[4923-91-5]	1000µg/mL	isooctane	1	1mL
0953.10-K-IO	2,4-/2,6-Dimethylbenzothiophene	162.26	[102035-96-1 /] [66142-67-4]	1000µg/mL	isooctane	1	1mL
0954.10-K-IO	2,5-Dimethylbenzothiophene	162.26	[16587-48-7]	1000µg/mL	isooctane	1	1mL
0357.10-K-IO	3,5-Dimethylbenzothiophene	162.26	[1964-45-0]	1000µg/mL	isooctane	1	1mL
0969.5-KIT	Dimethylbenzothiophene Kit						Kit

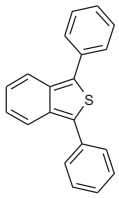
C3 Benzothiophenes

0955.11-K-IO	2,3,4-/2,3,6-Trimethylbenzothiophene	176.28	[80421-98-3 /] [91144-23-9]	1000µg/mL	isooctane	1	1mL
0956.11-K-IO	2,5,7-Trimethylbenzothiophene	176.28	[16587-65-8]	1000µg/mL	isooctane	1	1mL
0970.3-KIT	Trimethylbenzothiophene Kit						Kit
0971.15-KIT	Benzothiophene Kit						Kit

Benzo[c]thiophenes

1125.20 **1,3-Diphenylbenzo[c]thiophene**

[16587-39-6] MW 286.40



1125.20-K-IO 1000µg/mL isooctane, 1x1mL

Dibenzothiophenes

C0-C1 Dibenzothophenes

0884.12-500-IO	Dibenzothiophene		184.26	[132-65-0]	500µg/mL	isooctane	1	1mL
2501.13-10-T	1-Methyldibenzothiophene	1-MDMP	198.29	[31317-07-4]	10µg/mL	toluene	1	1mL
0886.13-500-IO	2-Methyldibenzothiophene	2-MDMP	198.29	[20928-02-3]	500µg/mL	isooctane	1	1mL
2499.13-50-IO	3-Methyldibenzothiophene	3-MDMP	198.29	[16587-52-3]	50µg/mL	isooctane	1	1mL
0887.13-500-IO	4-Methyldibenzothiophene	4-MDMP	198.29	[7372-88-5]	500µg/mL	isooctane	1	1mL
0892.5-KIT	C0-C1 Dibenzothiophene Kit							Kit

C2 Dibenzothiophenes

0932.14-500-IO	1,2-Dimethyldibenzothiophene	1,2-DMDMP	212.32	[31317-14-3]	500µg/mL	isooctane	1	1mL
0957.14-500-IO	1,3-Dimethyldibenzothiophene	1,3-DMDMP	212.32	[31317-15-4]	500µg/mL	isooctane	1	1mL
0919.14-500-IO	1,4-Dimethyldibenzothiophene	1,4-DMDMP	212.32	[21339-65-1]	500µg/mL	isooctane	1	1mL
0925.14-500-IO	2,3-Dimethyldibenzothiophene	2,3-DMDMP	212.32	[31317-17-6]	500µg/mL	isooctane	1	1mL
0918.14-500-IO	2,4-Dimethyldibenzothiophene	2,4-DMDMP	212.32	[31317-18-7]	500µg/mL	isooctane	1	1mL
1051.14-500-IO	2,6-Dimethyldibenzothiophene	2,6-DMDMP	212.32	[89816-75-1]	500µg/mL	isooctane	1	1mL
0449.14-500-IO	2,8-Dimethyldibenzothiophene	2,8-DMDMP	212.32	[1207-15-4]	500µg/mL	isooctane	1	1mL
0155.14-100-IO	3,6-Dimethyldibenzothiophene	3,6-DMDMP	212.32	[31613-04-4]	100µg/mL	isooctane	1	1mL
0915.14-500-IO	4,6-Dimethyldibenzothiophene	4,6-DMDMP	212.32	[1207-12-1]	500µg/mL	isooctane	1	1mL

0176.14-500-IO	2-Ethyldibenzothiophene	2-EDMP	212.32	[8916-98-8]	500µg/mL	isooctane	1	1mL
0148.14-500-IO	4-Ethyldibenzothiophene	4-EDMP	212.32	[89816-99-9]	500µg/mL	isooctane	1	1mL
0929.9-KIT	Dimethyldibenzothiophene Kit							Kit
1386.11-KIT	C2 Dibenzothiophene Kit							Kit

C3 Dibenzothiophenes

0159.15-500-IO	2,3,7-/2,3,8-Trimethyldibenzothiophene	226.34	[153524-16-4 /] [212332-91-7]	500µg/mL	isooctane	1	1mL
1750.15-100-IO	2,4,6-Trimethyldibenzothiophene 2,4,6-TDMP	226.34	[185493-79-7]	100µg/mL	isooctane	1	1mL
0158.15-500-IO	2,4,7-Trimethyldibenzothiophene 2,4,7-TDMP	226.34	[216983-03-8]	500µg/mL	isooctane	1	1mL
1751.15-100-IO	2,4,8-Trimethyldibenzothiophene 2,4,8-TDMP	226.34	[1210-52-2]	100µg/mL	isooctane	1	1mL
1752.15-500-IO	4-Ethyl-6-methyldibenzothiophene 4-E-6-MDMP	226.34	[132034-90-3]	500µg/mL	isooctane	1	1mL
0177.15-500-IO	2-n-Propyldibenzothiophene	226.34	[147792-30-1]	500µg/mL	isooctane	1	1mL
0149.15-500-IO	4-n-Propyldibenzothiophene	226.34	[132034-86-7]	500µg/mL	isooctane	1	1mL
0970.5-KIT	Trimethyldibenzothiophene Kit						Kit
1387.8-KIT	C3 Dibenzothiophene Kit						Kit

C4+ Dibenzothiophenes

3086.16-500-IO	4,6-Diethyldibenzothiophene	240.37	[132034-91-4]	500µg/mL	isooctane	1	1mL
0178.16-500-IO	2-n-Butyldibenzothiophene	240.37	[147792-31-2]	500µg/mL	isooctane	1	1mL
0150.16-500-IO	4-n-Butyldibenzothiophene	240.37	[147792-33-4]	500µg/mL	isooctane	1	1mL
0179.17-500-IO	2-n-Pentyldibenzothiophene	254.40	[147793-32-3]	500µg/mL	isooctane	1	1mL
0151.17-500-IO	4-n-Pentyldibenzothiophene	254.40	[147792-34-5]	500µg/mL	isooctane	1	1mL
1388.5-KIT	C4+ Dibenzothiophene Kit						Kit

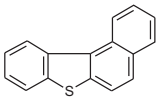
Phenyldibenzothiophenes

0145.18-500-IO	1-Phenyldibenzothiophene	260.36	[104353-06-2]	500µg/mL	isooctane	1	1mL
0143.18-500-IO	2-Phenyldibenzothiophene	260.36	[104353-07-3]	500µg/mL	isooctane	1	1mL
0146.18-500-IO	3-Phenyldibenzothiophene	260.36	[104601-38-9]	500µg/mL	isooctane	1	1mL
0144.18-500-IO	4-Phenyldibenzothiophene	260.36	[104601-39-0]	500µg/mL	isooctane	1	1mL
0147.4-KIT	Phenyldibenzothiophene Kit						Kit

Benzo-/ Naphtho-/ Acenaphthylenothiophenes

0483.16 **Benzo[b]naphtho[1,2-d] thiophene**

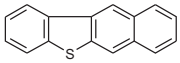
[205-43-6] MW 234.32



0483.16-200-T 200μg/mL toluene, 1x1mL

0484.16 **Benzo[b]naphtho[2,3-d] thiophene**

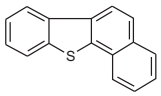
[243-46-9] MW 234.32



0484.16-200-T 200μg/mL toluene, 1x1mL

0485.16 **Benzo[b]naphtho[2,1-d] thiophene**

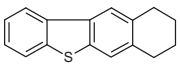
[239-35-0] MW 234.32



0485.16-200-T 200μg/mL toluene, 1x1mL

1295.16 **7,8,9,10-Tetrahydrobenzo[b] naphtho[2,3-d]thiophene**

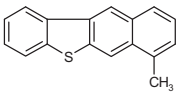
[39097-15-9] MW 238.35



1295.16-200-T 200μg/mL toluene, 1x1mL

1294.17 **7-Methylbenzo[b] naphtho[2,3-d]thiophene**

[24964-09-8] MW 248.35



1294.17-200-T 200μg/mL toluene, 1x1mL

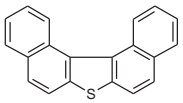
1296.17 **8-Methylbenzo[b] naphtho[2,3-d]thiophene**

[24964-07-6] MW 248.35

1296.17-200-T 200μg/mL toluene, 1x1mL

0486.20 **Dinaphtho[2,1-b;1′,2′-d] thiophene**

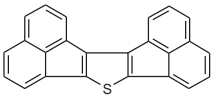
[194-65-0] MW 284.38



0486.20-200-T 200μg/mL toluene, 1x1mL

0487.24 **Diacenaphthyleno [1,2-b;1′,2′-d]thiophene**

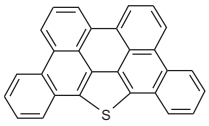
[203-42-9] MW 332.43



0487.24-200-T 200μg/mL toluene, 1x1mL

0039.28 **Dibenzo[2,3;10,11]peryleno [1,12-bcd]thiophene**

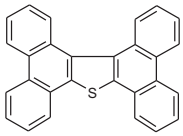
[196-23-6] MW 382.49



0039.28-20-CB 20μg/mL chlorobenzene, 1x1mL

0038.28 **Diphenanthro [9,10-b;9′,10′-d]thiophene**

[202-72-2] MW 384.50



0038.28-1MG	neat, 1x1mg
0038.28-200-T	200µg/mL toluene, 1x1mL

0493.10 **Benzo/Naphtho/ Acenaphthylenothiophene Kit**

0493.10-KIT	Kit

Hydroxydibenzothiophenes

2123.12-100-T	2-Hydroxydibenzothiophene	200.26	[22439-65-2]	100µg/mL	toluene	1	1mL

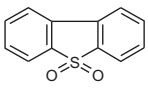
Bromodibenzothiophenes

0181.12-K-IO	2-Bromodibenzothiophene	263.16	[22439-61-8]	1000µg/mL	isooctane	1	1mL
0182.12-K-IO	4-Bromodibenzothiophene	263.16	[97511-05-2]	1000µg/mL	isooctane	1	1mL
1800.12-K-IO	2,8-Dibromodibenzothiophene	342.05	[31574-87-5]	1000µg/mL	isooctane	1	1mL
0183.3-KIT	Bromodibenzothiophene Kit						Kit

Other dibenzothiophenes

1753.12 **Dibenzothiophene sulfone**

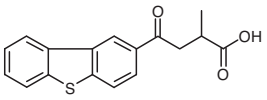
[1016-05-3] MW 216.26



1753.12-100MG	neat, 1x100mg

1289.17 **ϒ-Oxo-α-methyl-2-dibenzothiophenebutyric acid**

[26139-07-1] MW 298.36



1289.17-100-AN	100µg/mL acetonitrile, 1x1mL

PAOHs (Oxygen-heterocyclic PAHs)

Benzofurans

Benzofuran and alkylbenzofurans

1094.8-K-HX	Benzofuran	118.14	[271-89-6]	1000µg/mL	n-hexane	1	1mL
1098.8-K-HX	2,3-Dihydrobenzofuran	120.15	[496-16-2]	1000µg/mL	n-hexane	1	1mL
1095.9-K-IO	2-Methylbenzofuran	132.16	[4265-25-2]	1000µg/mL	isooctane	1	1mL
1746.9-K-IO	3-Methylbenzofuran	132.16	[21535-97-7]	1000µg/mL	isooctane	1	1mL
1511.9-K-IO	2,3-Dihydro-2-methylbenzofuran	134.18	[1746-11-8]	1000µg/mL	isooctane	1	1mL
1096.10-K-IO	2-Ethylbenzofuran	146.19	[3131-63-3]	1000µg/mL	isooctane	1	1mL
1097.12-K-IO	2-n-Butylbenzofuran	174.24	[4265-27-4]	1000µg/mL	isooctane	1	1mL
1099.7-KIT	Benzofuran Kit						Kit

Dibenzofurans

Dibenzofuran and methyldibenzofuranes

1100.12-K-IO	Dibenzofuran	168.20	[132-64-91]	1000µg/mL	isooctane	1	1mL
1101.13-K-IO	1-Methyldibenzofuran	182.22	[7320-50-5]	1000µg/mL	isooctane	1	1mL
1102.13-K-IO	2-Methyldibenzofuran	182.22	[7320-51-6]	1000µg/mL	isooctane	1	1mL
1103.13-K-IO	4-Methyldibenzofuran	182.22	[7320-53-8]	1000µg/mL	isooctane	1	1mL
1104.4-KIT	Dibenzofuran / Methyldibenzofuran Kit						Kit

Hydroxydibenzofurans

1595.12-10MG	2-Hydroxydibenzofuran	184.20	[86-77-1]	neat		1	10mg

Halodibenzofurans

2038.12-50-T	2,8-Dichlorodibenzofuran	237.09	[5409-83-6]	50µg/mL	toluene	1	1mL
2039.12-50-T	Octachlorodibenzofuran	443.76	[39001-02-0]	50µg/mL	toluene	1	1mL
2359.12-50-ME	2-Bromodibenzofuran	247.09	[86-76-0]	50µg/mL	methanol	1	1mL

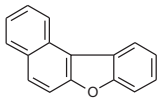
Phenyldibenzofurans

0171.18-500-IO	1-Phenyldibenzofuran	244.30	[63317-69-13]	500µg/mL	isooctane	1	1mL
0172.18-500-IO	2-Phenyldibenzofuran	244.30	[78210-31-8]	500µg/mL	isooctane	1	1mL
0174.18-500-IO	4-Phenyldibenzofuran	244.30	[74104-10-2]	500µg/mL	isooctane	1	1mL
0175.3-KIT	Phenyldibenzofuran Kit						Kit

Benzonaphthofurans

0024.16 **Benzo[b]naphtho[1,2-d]furan**

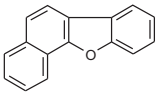
[205-39-0] MW 218.26



0024.16-200-T 200μg/mL toluene, 1x1mL

0040.16 **Benzo[b]naphtho[2,1-d]furan**

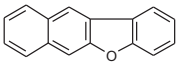
[239-30-5] MW 218.26



0040.16-200-T 200μg/mL toluene, 1x1mL

0018.16 **Benzo[b]naphtho[2,3-d]furan**

[243-42-5] MW 218.26

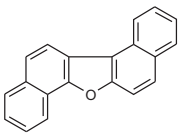


0018.16-200-T 200μg/mL toluene, 1x1mL

Dinaphthofurans

1495.20 **Dinaphtho[1,2-b;1′,2′-d]furan**

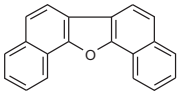
[207-93-2] MW 268.32



1495.20-200-T 200μg/mL toluene, 1x1mL

1117.20 **Dinaphtho[1,2-b;2′,1′-d]furan**

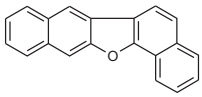
[239-69-0] MW 268.32



1117.20-200-T 200μg/mL toluene, 1x1mL

1118.20 **Dinaphtho[1,2-b;2′,3′-d]furan**

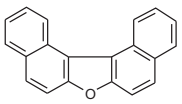
[239-90-7] MW 268.32



1118.20-200-T 200μg/mL toluene, 1x1mL

0064.20 **Dinaphtho[2,1-b;1′,2′-d]furan**

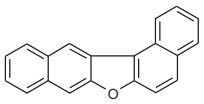
[194-63-8] MW 268.32



0064.20-200-T 200μg/mL toluene, 1x1mL

1119.20 **Dinaphtho[2,1-b;2′,3′-d]furan**

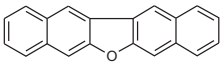
[204-91-1] MW 268.32



1119.20-200-T 200μg/mL toluene, 1x1mL

1120.20 **Dinaphtho[2,3-b;2′,3′-d]furan**

[242-51-3] MW 268.32



1120.20-200-T 200μg/mL toluene, 1x1mL

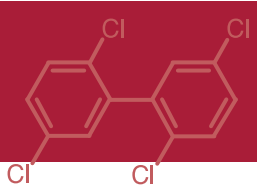
1179.9 **Benzo- and Dibenzonaphthofuran Kit**

1179.9-KIT Kit

1124.18 **Benzo[1,2-b;4,5-b′] bisbenzofuran**

[208-37-7] MW 258.28

1124.18-200-T 200μg/mL toluene, 1x1mL



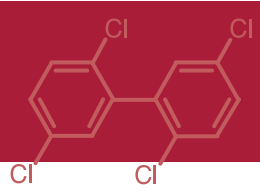
POPs (Persistent organic pollutants)

PCBs (Polychlorobiphenyls)

F-PCBs®, Internal standards for PCBs

NEW

1601.12-100MG	2-Fluorobiphenyl		172.20	[321-60-8]	neat		1	100mg
1712.12-100MG	4-Fluorobiphenyl	F-PCB-0p	172.20	[324-74-3]	neat		1	100mg
2654.12-100-IO	4-Chloro-4'-fluorobiphenyl	F-PCB-3p-3p	206.65	[398-22-1]	100µg/mL	isooctane	1	1mL
2745.12-100-IO	3'-Fluoro-3,5-dichlorobiphenyl	F-PCB-14	241.09	[844856-38-8]	100µg/mL	isooctane	1	1mL
2655.12-100-IO	3-Fluoro-4,4'-dichlorobiphenyl	F-PCB-15	241.09		100µg/mL	isooctane	1	1mL
2656.12-100-IO	3-Fluoro-2,2',5-trichlorobiphenyl	F-PCB-18m	275.54		100µg/mL	isooctane	1	1mL
2657.12-100-IO	3'-Fluoro-2,3,4'-trichlorobiphenyl	F-PCB-22m	275.54		100µg/mL	isooctane	1	1mL
2228.12-100-IO	3'-Fluoro-2,4,4'-trichlorobiphenyl	F-PCB-28m	275.54	[863314-89-0]	100µg/mL	isooctane	1	1mL
2223.12-100-IO	3'-Fluoro-2,4,5-trichlorobiphenyl	F-PCB-29m	275.54		100µg/mL	isooctane	1	1mL
2224.12-100-IO	2'-Fluoro-2,4,6-trichlorobiphenyl	F-PCB-30o	275.54	[876009-90-4]	100µg/mL	isooctane	1	1mL
2225.12-100-IO	3'-Fluoro-2,4,6-trichlorobiphenyl	F-PCB-30m	275.54	[876009-91-5]	100µg/mL	isooctane	1	1mL
2229.12-100-IO	4'-Fluoro-2,4,6-trichlorobiphenyl	F-PCB-30p	275.54	[876009-92-6]	100µg/mL	isooctane	1	1mL
2658.12-100-IO	3'-Fluoro-3,4,4'-trichlorobiphenyl	F-PCB -37 m	275.54		100µg/mL	isooctane	1	1mL
2666.12-100-IO	3'-Fluoro-3,4',5-trichlorobiphenyl	F-PCB-39	275.54		100µg/mL	isooctane	1	1mL
2177.12-100-IO	3-Fluoro-2,2',4,4'-tetrachlorobiphenyl	F-PCB-47	309.98	[876009-94-8]	100µg/mL	isooctane	1	1mL
2660.12-100-IO	3-Fluoro-2,2',5,5'-tetrachlorobiphenyl	F-PCB-52m	309.98	[876009-96-0]	100µg/mL	isooctane	1	1mL
2869.12-100-IO	3'-Fluoro-2,3,5,6-tetrachlorobiphenyl	F-PCB-65	309.98	[33284-54-7]	100µg/mL	isooctane	1	1mL
2222.12-100-IO	4'-Fluoro-2,3',4,5-tetrachlorobiphenyl	F-PCB-67	309.98		100µg/mL	isooctane	1	1mL
3800.12-100-IO	3'-Fluoro-2,4,4',5-tetrachlorobiphenyl	F-PCB-74	309.98		100µg/mL	isooctane	1	1mL
2863.12-10-IO	5-Fluoro-3,3',4,4'-tetrachlorobiphenyl	F-PCB-77	309.98		10µg/mL	isooctane	1	1mL
2344.12-10-IO	3'-Fluoro-3,4,4',5-tetrachlorobiphenyl	F-PCB-81	309.98		10µg/mL	isooctane	1	1mL
2864.12-10-IO	5'-Fluoro-2,3,3',4,4'-pentachlorobiphenyl	F-PCB-105	344.43		10µg/mL	isooctane	1	1mL
2870.12-10-IO	3'-Fluoro-2,3,4,4',5-pentachlorobiphenyl	F-PCB-114	344.43		10µg/mL	isooctane	1	1mL
3801.12-10-IO	3'-Fluoro-2,3,4,5,6-pentachlorobiphenyl	F-PCB-116	344.43	[29779-02-0]	10µg/mL	isooctane	1	1mL
2868.12-10-IO	3'-Fluoro-2,3,4',5,6-pentachlorobiphenyl	F-PCB-117	344.43		10µg/mL	isooctane	1	1mL
2865.12-10-IO	5'-Fluoro-2,3',4,4',5-pentachlorobiphenyl	F-PCB-118	344.43		10µg/mL	isooctane	1	1mL
2866.12-10-IO	5'-Fluoro-3,3',4,4',5-pentachlorobiphenyl	F-PCB-126	344.43		10µg/mL	isooctane	1	1mL
2871.12-10-IO	5'-Fluoro-2,3,3',4,4',5-hexachlorobiphenyl	F-PCB-156	378.87		10µg/mL	isooctane	1	1mL
3727.12-10-IO	2'-Fluoro-2,3,3',4,5,6-hexachlorobiphenyl	F-PCB-160o	378.87		10µg/mL	isooctane	1	1mL
3729.12-10-IO	4'-Fluoro-2,3,3',4,5,6-hexachlorobiphenyl	F-PCB-160p	378.87		10µg/mL	isooctane	1	1mL



3728.12-10-IO	5'-Fluoro-2,3,3',4,5,6-hexachlorobiphenyl	F-PCB-160m	378.87		10µg/mL	isooctane	1	1mL
2746.12-10-IO	3'-Fluoro-2,3,4,4',5,6-hexachlorobiphenyl	F-PCB-166	378.87		10µg/mL	isooctane	1	1mL
3730.12-10-IO	5'-Fluoro-2,3,3',4,4',5,6-heptachlorobiphenyl	F-PCB-190	414.37		10µg/mL	isooctane	1	1mL
1958.12-2K-AN	Decafluorobiphenyl		334.12	[434-90-2]	2000µg/mL	acetonitrile	1	1mL
1958.12-100MG	Decafluorobiphenyl		334.12	[434-90-2]	neat		1	100mg

Native PCBs

3731.12-100-IO	3,5-Dichlorobiphenyl	PCB-14	223.10	[34883-41-5]	100 µg/mL	Isooctane	1	1mL
3732.12-100-IO	4,4'-Dichlorobiphenyl	PCB-15	223.10	[2050-68-2]	100 µg/mL	Isooctane	1	1mL
2263.12-100-IO	2,2',5-Trichlorobiphenyl	PCB-18	257.55	[37680-65-2]	100 µg/mL	Isooctane	1	1mL
3734.12-100-IO	2,3,4'-Trichlorobiphenyl	PCB-22	257.55	[38444-86-9]	100µg/mL	isooctane	1	1mL
1999.12-100-IO	2,4,4'-Trichlorobiphenyl	PCB-28	257.55	[7012-37-5]	100 µg/mL	Isooctane	1	1mL
1999.12-10MG	2,4,4'-Trichlorobiphenyl	PCB-28	257.55	[7012-37-5]	neat		1	10mg
3619.12-100-IO	2,4,6-Trichlorobiphenyl	PCB-30	257.55	[35693-92-6]	100 µg/mL	Isooctane	1	10mL
2264.12-100-IO	2,4',5-Trichlorobiphenyl	PCB-31	257.55	[16606-02-3]	100 µg/mL	Isooctane	1	1mL
3735.12-100-IO	3,4,4'-Trichlorobiphenyl	PCB-37	257.55	[38444-90-5]	100µg/mL	isooctane	1	1mL
3736.12-100-IO	3,4',5-Trichlorobiphenyl	PCB-39	257.55	[38444-88-1]	100µg/mL	isooctane	1	1mL
3737.12-100-IO	2,2',3,4'-Tetrachlorobiphenyl	PCB-42	291.99	[36559-22-5]	100µg/mL	isooctane	1	1mL
2265.12-100-IO	2,2',3,5'-Tetrachlorobiphenyl	PCB-44	291.99	[41464-39-5]	100 µg/mL	Isooctane	1	1mL
3738.12-100-IO	2,2',4,4'-Tetrachlorobiphenyl	PCB-47	291.99	[2437-79-8]	100µg/mL	isooctane	1	1mL
2000.12-100-IO	2,2',5,5'-Tetrachlorobiphenyl	PCB-52	291.99	[35693-99-3]	100 µg/mL	Isooctane	1	1mL
2000.12-10MG	2,2',5,5'-Tetrachlorobiphenyl	PCB-52	291.99	[35693-99-3]	neat		1	10mg
3740.12-100-IO	2,3',4,5-Tetrachlorobiphenyl	PCB-67	291.99	[32598-11-1]	100µg/mL	isooctane	1	1mL
3739.12-100-ME	2,3,5,6-Tetrachlorobiphenyl	PCB-65	291.99	[33284-54-7]	100µg/mL	methanol	1	1mL
2904.12-100-IO	2,4,4',5-Tetrachlorobiphenyl	PCB-74	291.99	[32690-93-0]	100 µg/mL	Isooctane	1	1mL
2904.12-10MG	2,4,4',5-Tetrachlorobiphenyl	PCB-74	291.99	[32690-93-0]	neat		1	10mg
2006.12-100-IO	3,3',4,4'-Tetrachlorobiphenyl	PCB-77	291.99	[32598-13-3]	100 µg/mL	Isooctane	1	1mL
2007.12-100-IO	3,4,4',5-Tetrachlorobiphenyl	PCB-81	291.99	[70362-50-4]	100 µg/mL	Isooctane	1	1mL
2007.12-5MG	3,4,4',5-Tetrachlorobiphenyl	PCB-81	291.99	[70362-50-4]	neat		1	5mg
2906.12-100-IO	2,2',3,5',6-Pentachlorobiphenyl	PCB-95	326.44	[38379-99-6]	100µg/mL	Isooctane	1	1mL
2906.12-10MG	2,2',3,5',6-Pentachlorobiphenyl	PCB-95	326.44	[38379-99-6]	neat		1	10mg
2001.12-100-IO	2,2',4,5,5'-Pentachlorobiphenyl	PCB-101	326.44	[37680-73-2]	100 µg/mL	Isooctane	1	1mL
2001.12-10MG	2,2',4,5,5'-Pentachlorobiphenyl	PCB-101	326.44	[37680-73-2]	neat		1	10mg
2008.12-100-IO	2,3,3',4,4'-Pentachlorobiphenyl	PCB-105	326.44	[32598-14-4]	100 µg/mL	Isooctane	1	1mL
2720.12-100-IO	2,3,3',5,5'-Pentachlorobiphenyl	PCB-111	326.44	[39635-32-0]	100 µg/mL	isooctane	1	1mL
2009.12-100-IO	2,3,4,4',5-Pentachlorobiphenyl	PCB-114	326.44	[74472-37-0]	100 µg/mL	Isooctane	1	1mL
3741.12-100-IO	2,3,4',5,6-Pentachlorobiphenyl	PCB-117	326.44	[18259-05-7]	100 µg/mL	Isooctane	1	1mL
2002.12-100-IO	2,3',4,4',5-Pentachlorobiphenyl	PCB-118	326.44	[31508-00-6]	100 µg/mL	Isooctane	1	1mL
2002.12-10MG	2,3',4,4',5-Pentachlorobiphenyl	PCB-118	326.44	[31508-00-6]	neat		1	10mg
2011.12-100-IO	2',3,4,4',5-Pentachlorobiphenyl	PCB-123	326.44	[65510-44-3]	100 µg/mL	Isooctane	1	1mL
2012.12-5MG	3,3',4,4',5-Pentachlorobiphenyl	PCB-126	326.44	[57465-28-8]	neat		1	5mg
2012.12-100-IO	3,3',4,4',5-Pentachlorobiphenyl	PCB-126	326.44	[57465-28-8]	100 µg/mL	Isooctane	1	1mL
2895.12-100-IO	2,2',3,4,4',5-Hexachlorobiphenyl	PCB 137	360.88	[35694-06-5]	100 µg/mL	isooctane	1	1mL
2895.12-10MG	2,2',3,4,4',5-Hexachlorobiphenyl	PCB 137	360.88	[35694-06-5]	neat		1	10mg
2003.12-100-IO	2,2',3,4,4',5'-Hexachlorobiphenyl	PCB-138	360.88	[35065-28-2]	100 µg/mL	Isooctane	1	1mL
2003.12-10MG	2,2',3,4,4',5'-Hexachlorobiphenyl	PCB-138	360.88	[35065-28-2]	neat		1	10mg
3252.12-100-IO	2,2',3,4,5,6'-Hexachlorobiphenyl	PCB-143	360.88	[68194-15-0]	100 µg/mL	Isooctane	1	1mL
2266.12-100-IO	2,2',3,4',5',6-Hexachlorobiphenyl	PCB-149	360.88	[38380-04-0]	100 µg/mL	Isooctane	1	1mL
2004.12-100-IO	2,2',4,4',5,5'-Hexachlorobiphenyl	PCB-153	360.88	[35065-27-1]	100 µg/mL	Isooctane	1	1mL
2004.12-10MG	2,2',4,4',5,5'-Hexachlorobiphenyl	PCB-153	360.88	[35065-27-1]	neat		1	10mg
3308.12-100-IO	2,2',4,4,6,6'-Hexachlorobiphenyl	PCB-155	360.88	[33979-03-2]	100 µg/mL	Isooctane	1	1mL
2013.12-100-IO	2,3,3',4,4',5-Hexachlorobiphenyl	PCB-156	360.88	[38380-08-4]	100 µg/mL	Isooctane	1	1mL
2014.12-100-IO	2,3,3',4,4',5'-Hexachlorobiphenyl	PCB-157	360.88	[69782-90-7]	100 µg/mL	Isooctane	1	1mL
2015.12-100-IO	2,3',4,4',5,5'-Hexachlorobiphenyl	PCB-167	360.88	[52663-72-6]	100 µg/mL	Isooctane	1	1mL
3742.12-100-IO	2,3,4,4',5,6-Hexachlorobiphenyl	PCB-166	360.88	[734472-43-8]	100 µg/mL	Isooctane	1	1mL
2220.12-100-IO	3,3',4,4',5,5'-Hexachlorobiphenyl	PCB-169	360.88	[32774-16-6]	100 µg/mL	Isooctane	1	1mL

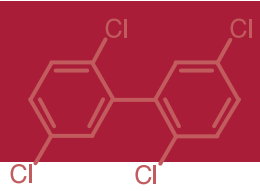
2267.12-100-IO	2,2',3,3',4,4',5-Heptachlorobiphenyl	PCB-170	395.33	[35065-30-6]	100 αg/mL	Isooctane	1	1mL
2005.12-100-IO	2,2',3,4,4',5,5'-Heptachlorobiphenyl	PCB-180	395.33	[35065-29-3]	100 αg/mL	Isooctane	1	1mL
2005.12-10MG	2,2',3,4,4',5,5'-Heptachlorobiphenyl	PCB-180	395.33	[35065-29-3]	neat		1	10mg
2016.12-100-IO	2,3,3',4,4',5,5'-Heptachlorobiphenyl	PCB-189	395.33	[39635-31-9]	100 αg/mL	Isooctane	1	1mL
3743.12-100-IO	2,3,3',4,4',5,6-Heptachlorobiphenyl	PCB-190	395.33	[74472-50-7]	100 αg/mL	Isooctane	1	1mL
2268.12-100-IO	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	PCB-194	429.77	[35694-08-7]	100 αg/mL	Isooctane	1	1mL
2477.12-100-IO	2,2',3,4,4',5,6,6'-Octachlorobiphenyl	PCB-204	429.77	[74472-52-9]	100 µg/mL	isooctane	1	1mL
3604.12-100-IO	2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	PCB-207	464.22	[52663-79-3]				

AminoPCBs

1805.12-K-IO	2,2',5,5'-Tetrachlorobenzidine	322.02	[15721-02-5]	1000µg/mL	isooctane	1	1mL

Arochlors

2124.12-10-IO	Arochlor 1016	154.21	[12674-11-2]	10µg/mL	isooctane	1	1mL
2124.12-100-IO	Arochlor 1016	154.21	[12674-11-2]	100µg/mL	isooctane	1	1mL
2124.12-K-IO	Arochlor 1016	154.21	[12674-11-2]	1000µg/mL	isooctane	1	1mL
2124.12-10-IO	Arochlor 1016	154.21	[12674-11-2]	10µg/mL	isooctane	5	1mL
2124.12-100-IO	Arochlor 1016	154.21	[12674-11-2]	100µg/mL	isooctane	5	1mL
2124.12-K-IO	Arochlor 1016	154.21	[12674-11-2]	1000µg/mL	isooctane	5	1mL
2124.12-10-IO	Arochlor 1016	154.21	[12674-11-2]	10µg/mL	isooctane	10	1mL
2124.12-100-IO	Arochlor 1016	154.21	[12674-11-2]	100µg/mL	isooctane	10	1mL
2124.12-K-IO	Arochlor 1016	154.21	[12674-11-2]	1000µg/mL	isooctane	10	1mL
2125.12-10-IO	Arochlor 1221	154.21	[11104-28-2]	10µg/mL	isooctane	1	1mL
2125.12-100-IO	Arochlor 1221	154.21	[11104-28-2]	100µg/mL	isooctane	1	1mL
2125.12-K-IO	Arochlor 1221	154.21	[11104-28-2]	1000µg/mL	isooctane	1	1mL
2125.12-10-IO	Arochlor 1221	154.21	[11104-28-2]	10µg/mL	isooctane	5	1mL
2125.12-100-IO	Arochlor 1221	154.21	[11104-28-2]	100µg/mL	isooctane	5	1mL
2125.12-K-IO	Arochlor 1221	154.21	[11104-28-2]	1000µg/mL	isooctane	5	1mL
2125.12-10-IO	Arochlor 1221	154.21	[11104-28-2]	10µg/mL	isooctane	10	1mL
2125.12-100-IO	Arochlor 1221	154.21	[11104-28-2]	100µg/mL	isooctane	10	1mL
2125.12-K-IO	Arochlor 1221	154.21	[11104-28-2]	1000µg/mL	isooctane	10	1mL
2661.12-10-IO	Arochlor 1232	154.21	[11141-16-5]	10µg/mL	isooctane	1	1mL
2661.12-100-IO	Arochlor 1232	154.21	[11141-16-5]	100µg/mL	isooctane	1	1mL
2661.12-K-IO	Arochlor 1232	154.21	[11141-16-5]	1000µg/mL	isooctane	1	1mL
2661.12-10-IO	Arochlor 1232	154.21	[11141-16-5]	10µg/mL	isooctane	5	1mL
2661.12-100-IO	Arochlor 1232	154.21	[11141-16-5]	100µg/mL	isooctane	5	1mL
2661.12-K-IO	Arochlor 1232	154.21	[11141-16-5]	1000µg/mL	isooctane	5	1mL
2661.12-10-IO	Arochlor 1232	154.21	[11141-16-5]	10µg/mL	isooctane	10	1mL
2661.12-100-IO	Arochlor 1232	154.21	[11141-16-5]	100µg/mL	isooctane	10	1mL
2661.12-K-IO	Arochlor 1232	154.21	[11141-16-5]	1000µg/mL	isooctane	10	1mL
2126.12-10-IO	Arochlor 1242	154.21	[53469-21-9]	10µg/mL	isooctane	1	1mL
2126.12-100-IO	Arochlor 1242	154.21	[53469-21-9]	100µg/mL	isooctane	1	1mL
2126.12-K-IO	Arochlor 1242	154.21	[53469-21-9]	1000µg/mL	isooctane	1	1mL
2126.12-10-IO	Arochlor 1242	154.21	[53469-21-9]	10µg/mL	isooctane	5	1mL
2126.12-100-IO	Arochlor 1242	154.21	[53469-21-9]	100µg/mL	isooctane	5	1mL
2126.12-K-IO	Arochlor 1242	154.21	[53469-21-9]	1000µg/mL	isooctane	5	1mL
2126.12-10-IO	Arochlor 1242	154.21	[53469-21-9]	10µg/mL	isooctane	10	1mL
2126.12-100-IO	Arochlor 1242	154.21	[53469-21-9]	100µg/mL	isooctane	10	1mL
2126.12-K-IO	Arochlor 1242	154.21	[53469-21-9]	1000µg/mL	isooctane	10	1mL
2127.12-10-IO	Arochlor 1248	154.21	[12672-29-6]	10µg/mL	isooctane	1	1mL
2127.12-100-IO	Arochlor 1248	154.21	[12672-29-6]	100µg/mL	isooctane	1	1mL
2127.12-K-IO	Arochlor 1248	154.21	[12672-29-6]	1000µg/mL	isooctane	1	1mL
2127.12-10-IO	Arochlor 1248	154.21	[12672-29-6]	10µg/mL	isooctane	5	1mL



2127.12-100-IO	Arochlor 1248		154.21	[12672-29-6]	100µg/mL	isooctane	5	1mL
2127.12-K-IO	Arochlor 1248		154.21	[12672-29-6]	1000µg/mL	isooctane	5	1mL
2127.12-10-IO	Arochlor 1248		154.21	[12672-29-6]	10µg/mL	isooctane	10	1mL
2127.12-100-IO	Arochlor 1248		154.21	[12672-29-6]	100µg/mL	isooctane	10	1mL
2127.12-K-IO	Arochlor 1248		154.21	[12672-29-6]	1000µg/mL	isooctane	10	1mL
2128.12-10-IO	Arochlor 1254		154.21	[11097-69-1]	10µg/mL	isooctane	1	1mL
2128.12-100-IO	Arochlor 1254		154.21	[11097-69-1]	100µg/mL	isooctane	1	1mL
2128.12-K-IO	Arochlor 1254		154.21	[11097-69-1]	1000µg/mL	isooctane	1	1mL
2128.12-10-IO	Arochlor 1254		154.21	[11097-69-1]	10µg/mL	isooctane	5	1mL
2128.12-100-IO	Arochlor 1254		154.21	[11097-69-1]	100µg/mL	isooctane	5	1mL
2128.12-K-IO	Arochlor 1254		154.21	[11097-69-1]	1000µg/mL	isooctane	5	1mL
2128.12-10-IO	Arochlor 1254		154.21	[11097-69-1]	10µg/mL	isooctane	10	1mL
2128.12-100-IO	Arochlor 1254		154.21	[11097-69-1]	100µg/mL	isooctane	10	1mL
2128.12-K-IO	Arochlor 1254		154.21	[11097-69-1]	1000µg/mL	isooctane	10	1mL
2129.12-10-IO	Arochlor 1260		154.21	[11096-82-5]	10µg/mL	isooctane	1	1mL
2129.12-100-IO	Arochlor 1260		154.21	[11096-82-5]	100µg/mL	isooctane	1	1mL
2129.12-K-IO	Arochlor 1260		154.21	[11096-82-5]	1000µg/mL	isooctane	1	1mL
2129.12-10-IO	Arochlor 1260		154.21	[11096-82-5]	10µg/mL	isooctane	5	1mL
2129.12-100-IO	Arochlor 1260		154.21	[11096-82-5]	100µg/mL	isooctane	5	1mL
2129.12-K-IO	Arochlor 1260		154.21	[11096-82-5]	1000µg/mL	isooctane	5	1mL
2129.12-10-IO	Arochlor 1260		154.21	[11096-82-5]	10µg/mL	isooctane	10	1mL
2129.12-100-IO	Arochlor 1260		154.21	[11096-82-5]	100µg/mL	isooctane	10	1mL
2129.12-K-IO	Arochlor 1260		154.21	[11096-82-5]	1000µg/mL	isooctane	10	1mL
2326.12-10-IO	Arochlor 5460		154.21		10µg/mL	isooctane	1	1mL
2326.12-100-IO	Arochlor 5460		154.21		100µg/mL	isooctane	1	1mL
2326.12-K-IO	Arochlor 5460		154.21		1000µg/mL	isooctane	1	1mL
2326.12-10-IO	Arochlor 5460		154.21		10µg/mL	isooctane	5	1mL
2326.12-100-IO	Arochlor 5460		154.21		100µg/mL	isooctane	5	1mL
2326.12-K-IO	Arochlor 5460		154.21		1000µg/mL	isooctane	5	1mL
2326.12-10-IO	Arochlor 5460		154.21		10µg/mL	isooctane	10	1mL
2326.12-100-IO	Arochlor 5460		154.21		100µg/mL	isooctane	10	1mL
2326.12-K-IO	Arochlor 5460		154.21		1000µg/mL	isooctane	10	1mL

PBBs (Polybromobiphenyls)

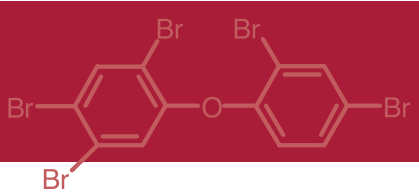
NEW

F-PBBs (Fluoro-bromobiphenyl internal standards)

2891.12-2K-DC	4,4'-Dibromooctafluorobiphenyl	F-PBB	455.93	[10386-84-2]	2000µg/mL	DCM	1	1mL
2891.12-100-IO	4,4'-Dibromooctafluorobiphenyl	F-PBB	455.93	[10386-84-2]	100µg/mL	isooctane	1	1mL

Native PBBs (polybromobiphenyls)

3089.12-50-IO	2-Bromobiphenyl	PBB-1	233.10	[2052-07-5]	50µg/mL	isooctane	1	1mL
3090.12-50-IO	3-Bromobiphenyl	PBB-2	233.10	[2113-57-7]	50µg/mL	isooctane	1	1mL
3091.12-50-IO	4-Bromobiphenyl	PBB-3	233.10	[92-66-0]	50µg/mL	isooctane	1	1mL
3092.12-50-IO	2,2'-Dibromobiphenyl	PBB-4	312.00	[13029-09-9]	50µg/mL	isooctane	1	1mL
3093.12-50-IO	2,4-Dibromobiphenyl	PBB-7	312.00	[53592-10-2]	50µg/mL	isooctane	1	1mL
3094.12-50-IO	2,5-Dibromobiphenyl	PBB-9	312.00	[57422-77-2]	50µg/mL	isooctane	1	1mL
3095.12-50-IO	2,6-Dibromobiphenyl	PBB-10	312.00	[59080-32-9]	50µg/mL	isooctane	1	1mL
3096.12-50-IO	4,4'-Dibromobiphenyl	PBB-15	312.00	[92-86-4]	50µg/mL	isooctane	1	1mL
3097.12-50-IO	2,2',5-Tribromobiphenyl	PBB-18	390.90	[59080-34-1]	50µg/mL	isooctane	1	1mL
3098.12-50-IO	2,3',5-Tribromobiphenyl	PBB-26	390.90	[59080-35-2]	50µg/mL	isooctane	1	1mL
2664.12-50-IO	2,4,5-Tribromobiphenyl	PBB-29	390.90	[115245-07-3]	50µg/mL	isooctane	1	1mL
2744.12-35-IO	2,4,6-Tribromobiphenyl	PBB-30	390.90	[59080-33-0]	35µg/mL	isooctane	1	1mL
2744.12-50-IO	2,4,6-Tribromobiphenyl	PBB-30	390.90	[59080-33-0]	50µg/mL	isooctane	1	1mL
3099.12-50-IO	2,4',5-Tribromobiphenyl	PBB-31	390.90	[59080-36-3]	50µg/mL	isooctane	1	1mL
3101.12-50-IO	3,4,5-Tribromobiphenyl	PBB-38	390.90	[115245-08-4]	50µg/mL	isooctane	1	1mL
3102.12-50-IO	2,2',4,5'-Tetrabromobiphenyl	PBB-49	469.80	[60044-24-8]	50µg/mL	isooctane	1	1mL
3103.12-50-IO	2,2',5,5'-Tetrabromobiphenyl	PBB-52	469.80	[59080-37-4]	50µg/mL	isooctane	1	1mL
3104.12-50-IO	2,2',5,6'-Tetrabromobiphenyl	PBB-56	469.80	[60044-25-9]	50µg/mL	isooctane	1	1mL
3105.12-50-IO	3,3',5,5'-Tetrabromobiphenyl	PBB-80	469.80	[16400-50-3]	50µg/mL	isooctane	1	1mL



3106.12-50-IO	2,2',4,5,5'-Pentabromobiphenyl	PBB-101	548.70	[67888-96-4]	50µg/mL	isooctane	1	1mL
3107.12-50-IO	2,2',4,5',6-Pentabromobiphenyl	PBB-103	548.70	[59080-39-6]	50µg/mL	isooctane	1	1mL
3108.12-50-IO	2,2',4,4',5,5'-Hexabromobiphenyl	PBB-153	627.60	[59080-40-9]	50µg/mL	isooctane	1	1mL
3110.12-50-IO	2,2',4,4',6,6'-Hexabromobiphenyl	PBB-155	627.60	[59261-08-4]	50µg/mL	isooctane	1	1mL
3109.12-10-IO	3,3',4,4',5,5'-Hexabromobiphenyl	PBB-169	627.60	[60044-26-0]	10µg/mL	isooctane	1	1mL
2679.12-50-IO	Octabromodiphenyl, techn.	PBB	785.38	[27858-07-7]	50µg/mL	isooctane	1	1mL
2677.12-50-IO	Decabromodiphenyl	PBB-209	943.17	[13654-09-6]	50µg/mL	isooctane	1	1mL
3111.25-KIT	PBB Kit							Kit

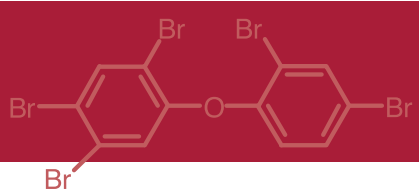
Dioxins

1527.12-50-T	Dibenzo-p-dioxin-d8	192.24	[69699-83-8]	50µg/mL	toluene	1	1mL
2029.12-50-T	Dibenzo-p-dioxin	184.20	[262-12-4]	50µg/mL	toluene	1	1mL
2030.12-50-T	1-Chlorodibenzo-p-dioxin	218.64	[39227-53-7]	50µg/mL	toluene	1	1mL
2032.12-50-T	2-Chlorodibenzo-p-dioxin	218.64	[39227-54-8]	50µg/mL	toluene	1	1mL
2031.12-50-T	2,7-Dichlorodibenzo-p-dioxin	253.09	[33857-26-0]	50µg/mL	toluene	1	1mL
2033.12-50-T	1,2,4-Trichlorodibenzo-p-dioxin	283.59	[39227-58-2]	50µg/mL	toluene	1	1mL
2034.12-50-T	1,2,3,4-Tetrachlorodibenzo-p-dioxin	321.98	[30746-58-8]	50µg/mL	toluene	1	1mL
2036.12-50-T	Octachlorodibenzo-p-dioxin	459.76	[3268-87-9]	50µg/mL	toluene	1	1mL

Flame retardants

F-PBDE® internal standards

1604.12-50-IO	2-Fluorodiphenyl ether	F-PBDE-0 ortho	188.20	[124330-20-7]	50µg/mL	isooctane	1	1mL
1605.12-50-IO	4-Fluorodiphenyl ether	F-PBDE-0 para	188.20	[330-84-7]	50µg/mL	isooctane	1	1mL
2178.12-K-IO	2,4'-Difluorodiphenyl ether		206.19	[863315-03-1]	1000µg/mL	isooctane	1	1mL
3620.12-K-IO	3,3'-Difluorodiphenyl ether		206.19	[1800-48-2]	1000µg/mL	isooctane	1	1mL
1608.12-50-IO	3-Bromo-4'-fluorodiphenyl ether	F-PBDE-2	267.10	[50904-38-6]	50µg/mL	isooctane	1	1mL
2258.12-50-IO	3'-Fluoro-2,4-dibromodiphenyl ether	F-PBDE-7	346.00		50µg/mL	isooctane	1	1mL
2257.12-50-IO	3'-Fluoro-3,4-dibromodiphenyl ether	F-PBDE-12	346.00		50µg/mL	isooctane	1	1mL
1926.12-50-IO	4'-Fluoro-2,3',4-tribromodiphenyl ether	F-PBDE-25	424.89	[863314-85-6]	50µg/mL	isooctane	1	1mL
1927.12-50-IO	4'-Fluoro-2,3',6-tribromodiphenyl ether	F-PBDE-27	424.89	[863314-86-7]	50µg/mL	isooctane	1	1mL
2160.12-50-T	2'-Fluoro-2,4,4'-tribromodiphenyl ether	F-PBDE-28	424.89	[876310-22-4]	50µg/mL	toluene	1	1mL
2161.12-50-T	6-Fluoro-2,2',4,4'-tetrabromodiphenyl ether	F-PBDE-47	503.79	[876310-23-4]	50µg/mL	toluene	1	1mL
2506.12-50-IO	5,5'-Difluoro-2,2',4,4'-tetrabromodiphenyl ether (2,2',4,4'-Tetrabromo-5,5'-difluorodiphenyl ether)	2F-PBDE-47	521.78	[886748-32-9]	50µg/mL	isooctane	1	1mL
2162.12-50-IO	6-Fluoro-2,3',4,4'-tetrabromodiphenyl ether	F-PBDE-66	503.79	[87310-24-6]	50µg/mL	isooctane	1	1mL
1928.12-50-IO	4'-Fluoro-2,3',4,6-tetrabromodiphenyl ether	F-PBDE-69	503.79	[863314-87-8]	50µg/mL	isooctane	1	1mL
2503.12-50-IO	5,6-Difluoro-2,2',3,4,4'-pentabromodiphenylether (2,2',3,4,4'-Pentabromo-5,6-difluorodiphenyl ether)	2F-PBDE-85	600.67	[886748-33-0]	50µg/mL	isooctane	1	1mL
2505.12-50-IO	3,6-Difluoro-2,2',4,4',5-pentabromodiphenyl ether (2,2',4,4',5-Pentabromo-3,6-difluorodiphenyl ether)	2F-PBDE-99	600.67	[886748-34-1]	50µg/mL	isooctane	1	1mL
2163.12-50-T	3-Fluoro-2,2',4,4',6-pentabromodiphenyl ether	F-PBDE-100	582.68	[887401-80-1]	50µg/mL	toluene	1	1mL
2164.12-50-IO	3-Fluoro-2,3',4,4',6-pentabromodiphenyl ether	F-PBDE-119	582.68	[876310-26-8]	50µg/mL	Isooctane	1	1mL



2504.12-50-IO	3,5-Difluoro-2,3',4,4',6-pentabromodiphenyl ether (2,3',4,4',6-Pentabromo-3,5-difluorodiphenyl ether)	2F-PBDE-119	600.67	[886748-35-2]	50µg/mL	isooctane	1	1mL
1929.12-50-T	4'-Fluoro-2,3,3',4,5,6-hexabromodiphenyl ether	F-PBDE-160	661.58	[863314-88-9]	50µg/mL	toluene	1	1mL
2166.12-50-T	3-Fluoro-2,2',4,4',5,5',6-heptabromodiphenyl ether	F-PBDE-183	740.48	[876310-28-0]	50µg/mL	isooctane	1	1mL
2167.12-50-T	2,4'-Difluoro-2,3,3',4,5,5',6,6'-Octabromodiphenyl ether	2F-PBDE-201	837.36	[863314-96-9]	50µg/mL	toluene	1	1mL
2168.12-50-IO	4'-Fluoro-2,2',3,3',4,5,5',6,6'-nonabromodiphenyl ether	F-PBDE-208	898.27	[876310-29-1]	50µg/mL	isooctane	1	1mL

Native PBDEs

1960.12-50-IO	2,3',4-Tribromodiphenyl ether	PBDE-25	406.90	[147217-77-4]	50µg/mL	isooctane	1	1mL
1960.12-5MG	2,3',4-Tribromodiphenyl ether	PBDE-25	406.90	[147217-77-4]	neat		1	5mg
1961.12-50-IO	2,4,4'-Tribromodiphenyl ether	PBDE-28	406.90	[41318-75-6]	50µg/mL	isooctane	1	1mL
1961.12-5MG	2,4,4'-Tribromodiphenyl ether	PBDE-28	406.90	[41318-75-6]	neat		1	5mg
2116.12-50-IO	3,3',4-Tribromodiphenyl ether	PBDE-35	406.90	[147217-80-9]	50µg/mL	isooctane	1	1mL
1962.12-50-IO	2,2',4,4'-Tetrabromodiphenyl ether	PBDE-47	485.80	[5436-43-1]	50µg/mL	isooctane	1	1mL
1962.12-50-IO	2,2',4,4'-Tetrabromodiphenyl ether	PBDE-47	485.80	[5436-43-1]	50µg/mL	isooctane	10	1mL
1962.12-50-IO	2,2',4,4'-Tetrabromodiphenyl ether	PBDE-47	485.80	[5436-43-1]	50µg/mL	isooctane	20	1mL
1962.12-5MG	2,2',4,4'-Tetrabromodiphenyl ether	PBDE-47	485.80	[5436-43-1]	neat		1	5mg
1963.12-50-IO	2,2',4,5'-Tetrabromodiphenyl ether	PBDE-49	485.80	[243982-82-3]	50µg/mL	isooctane	1	1mL
1963.12-5MG	2,2',4,5'-Tetrabromodiphenyl ether	PBDE-49	485.80	[243982-82-3]	neat		1	5mg
1964.12-50-IO	2,3',4,4-Tetrabromodiphenyl ether	PBDE-66	485.80	[189084-61-5]	50µg/mL	isooctane	1	1mL
1964.12-5MG	2,3',4,4-Tetrabromodiphenyl ether	PBDE-66	485.80	[189084-61-5]	neat		1	5mg
1965.12-50-IO	2,3',4',6-Tetrabromodiphenyl ether	PBDE-71	485.80	[189084-62-6]	50µg/mL	isooctane	1	1mL
1965.12-5MG	2,3',4',6-Tetrabromodiphenyl ether	PBDE-71	485.80	[189084-62-6]	neat		1	5mg
1990.12-50-IO	2,4,4',6-Tetrabromodiphenyl ether	PBDE-75	485.80	[189084-63-7]	50µg/mL	isooctane	1	1mL
1990.12-5MG	2,4,4',6-Tetrabromodiphenyl ether	PBDE-75	485.80	[189084-63-7]	neat		1	5mg
1991.12-50-IO	3,3',4,4'-Tetrabromodiphenyl ether	PBDE-77	485.80	[93703-48-1]	50µg/mL	isooctane	1	1mL
1991.12-5MG	3,3',4,4'-Tetrabromodiphenyl ether	PBDE-77	485.80	[93703-48-1]	neat		1	5mg
1966.12-50-IO	2,2',3,4,4'-Pentabromodiphenyl ether	PBDE-85	564.69	[182346-21-0]	50µg/mL	isooctane	1	1mL
1966.12-5MG	2,2',3,4,4'-Pentabromodiphenyl ether	PBDE-85	564.69	[182346-21-0]	neat		1	5mg
1967.12-50-IO	2,2',4,4',5-Pentabromodiphenyl ether	PBDE-99	564.69	[60348-60-9]	50µg/mL	isooctane	1	1mL
1967.12-5MG	2,2',4,4',5-Pentabromodiphenyl ether	PBDE-99	564.69	[60348-60-9]	neat		1	5mg
1968.12-50-IO	2,2',4,4',6-Pentabromodiphenyl ether	PBDE-100	564.69	[189084-64-8]	50µg/mL	isooctane	1	1mL
1968.12-5MG	2,2',4,4',6-Pentabromodiphenyl ether	PBDE-100	564.69	[189084-64-8]	neat		1	5mg
2867.12-50-IO	2,3',4,4',5-Pentachlorobiphenyl ether	PBDE-118	564.69	[446254-80-4]	50µg/mL	isooctane	1	1mL
1969.12-50-IO	2,3',4,4',6-Pentabromodiphenyl ether	PBDE-119	564.69	[189084-66-0]	50µg/mL	isooctane	1	1mL
1969.12-5MG	2,3',4,4',6-Pentabromodiphenyl ether	PBDE-119	564.69	[189084-66-0]	neat		1	5mg
1970.12-50-IO	2,2',3,4,4',5-Hexabromodiphenyl ether	PBDE-138	643.59	[182677-30-1]	50µg/mL	isooctane	1	1mL
1970.12-5MG	2,2',3,4,4',5-Hexabromodiphenyl ether	PBDE-138	643.59	[182677-30-1]	neat		1	5mg
1971.12-50-IO	2,2',4,4',5,5'-Hexabromodiphenyl ether	PBDE-153	643.59	[68631-49-2]	50µg/mL	isooctane	1	1mL
1971.12-5MG	2,2',4,4',5,5'-Hexabromodiphenyl ether	PBDE-153	643.59	[68631-49-2]	neat		1	5mg
1972.12-50-IO	2,2',4,4',5,6'-Hexabromodiphenyl ether	PBDE-154	643.59	[207122-15-4]	50µg/mL	isooctane	1	1mL
1972.12-5MG	2,2',4,4',5,6'-Hexabromodiphenyl ether	PBDE-154	643.59	[207122-15-4]	neat		1	5mg
2652.12-50-IO	2,2',3,4,4',5,6-Heptabromodiphenyl ether	PBDE-181	722.49	[189084-67-1]	50µg/mL	isooctane	1	1mL
1973.12-50-IO	2,2',3,4,4',5',6'-Heptabromodiphenyl ether	PBDE-183	722.49	[207122-16-5]	50µg/mL	isooctane	1	1mL
1973.12-5MG	2,2',3,4,4',5',6'-Heptabromodiphenyl ether	PBDE-183	722.49	[207122-16-5]	neat		1	5mg
1992.12-50-IO	2,3,3',4,4',5,6-Heptabromodiphenyl ether	PBDE-190	722.49	[189084-68-2]	50µg/mL	isooctane	1	1mL

1992.12-5MG	2,3,3',4,4',5,6-Heptabromodiphenyl ether	PBDE-190	722.49	[189084-68-2]	neat		1	5mg
2486.12-50-IO	2,2',3,3',4,4',5,6-Octabromodiphenyl ether	PBDE-195	785.38	[446255-38-5]	50µg/mL	isooctane	1	1mL
1975.12-50-IO	2,2',3,4,4',5,5',6'-Octabromodiphenyl ether	PBDE-203	801.38	[337513-72-1]	50µg/mL	Isooctane	1	1mL
1975.12-5MG	2,2',3,4,4',5,5',6'-Octabromodiphenyl ether	PBDE-203	801.38	[337513-72-1]	neat		1	5mg
2647.12-50-IO	2,3,3',4,4',5,5',6-Octabromodiphenyl ether	PBDE-205	801.38	[446255-56-7]	50µg/mL	isooctane	1	1mL
1811.12-50-IO	Decabromodiphenyl ether	PBDE-209	959.17	[1163-19-5]	50µg/mL	isooctane	1	1mL
1811.12-5MG	Decabromodiphenyl ether	PBDE-209	959.17	[1163-19-5]	neat		1	5mg
2653.9-50-IO	Lake Michigan Study' PBDEs (Kit w/single solutions)				50µg/mL	isooctane	1	Kit
2665.10-50-IO	Other relevant PBDEs (Kit w/single solutions)				50µg/mL	isooctane	1	Kit
3686.24-KIT	PBDE solutions Kit							Kit

Aminodiphenyl ethers

2764.12-1ML	4-Aminodiphenyl ether	200.24	[101-80-4]	neat		1	1mL

Other brominated flame retardants

2071.7 **4-Chloro-3-methylphenol**

[59-50-7] MW 142.59

2071.7-K-IP 1000µg/mL isopropanol, 1x1mL

2677.12 **Decabromodiphenyl**

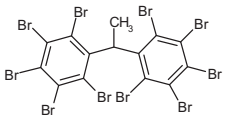
PBB-209

[13654-09-6] MW 943.17

2677.12-50-IO 50µg/mL isooctane, 1x1mL

2670.14 **Decabromodiphenylethane**

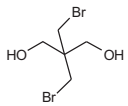
[84852-53-9] MW 971.23



2670.14-50-IO 50µg/mL isooctane, 1x1mL

2671.5 **Dibromoneopentylglycol**

[3296-90-0] MW 261.94



2671.5-50-IP 50µg/mL isopropanol, 1x1mL

2061.6 **2,4-Dibromophenol**

[615-58-7] MW 251.91

2061.6-K-IP 1000µg/mL isopropanol, 1x1mL

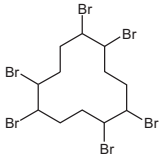
2678.6 **Hexabromobenzene**

[87-82-1] MW 551.49

2678.6-50-IO 50µg/mL isooctane, 1x1mL

1893.12 **1,2,5,6,9,10-Hexabromocyclododecane**

[3194-55-6] MW 641.70



1893.12-K-IO 1000µg/mL isooctane, 1x1mL

1894.6 **1,2,3,4,5,6-Hexabromocyclohexane**
[1837-91-8] MW 557.54

1894.6-50-IO 50µg/mL isooctane, 1x1mL

2679.12 **Octabromodiphenyl, techn.**
PBB
[27858-07-7] MW 785.38

2679.12-50-IO 50µg/mL isooctane, 1x1mL

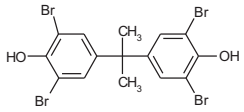
2672.6 **Pentabromophenol**
[608-71-9] MW 488.59

2672.6-50-IO 50µg/mL isooctane, 1x1mL

2673.7 **Pentabromotoluene**
[87-83-2] MW 486.62

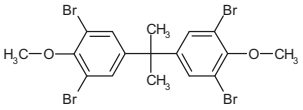
2673.7-50-IO 50µg/mL isooctane, 1x1mL

2674.15 **Tetrabromobisphenol A**
[79-94-7] MW 543.88



2674.15-50-IO 50µg/mL isooctane, 1x1mL

2675.17 **Tetrabromobisphenol A dimethyl ether**
[37853-61-5] MW 571.93



2675.17-50-IO 50µg/mL isooctane, 1x1mL

2676.8 **Tetrabromophthalic anhydride**
[632-79-1] MW 463.70

2676.8-50-IO 50µg/mL isooctane, 1x1mL

1812.18 **Tetradecabromo-1,4-diphenoxybenzene**
[58965-66-5] MW 1366.86

1812.18-50-CY 50µg/mL cyclohexane, 1x1mL

2060.6 **2,4,6-Tribromophenol**
[118-79-6] MW 330.80

2060.6-K-IP 1000µg/mL isopropanol, 1x1mL

PCNs (Polychloronaphthalenes)

NEW

1993.10-50-IO	1-Chloronaphthalene	PCN-1	162.62	[90-13-1]	50µg/mL	Isooctane	1	1mL
1994.10-50-IO	2-Chloronaphthalene	PCN-2	162.62	[91-58-7]	50µg/mL	Isooctane	1	1mL
1995.10-50-IO	1,4-Dichloronaphthalene	PCN-5	197.07	[1825-31-6]	50µg/mL	Isooctane	1	1mL
1996.10-50-IO	1,5-Dichloronaphthalene	PCN-6	197.07	[1825-30-5]	50µg/mL	Isooctane	1	1mL
1997.10-50-IO	2,3-Dichloronaphthalene	PCN-10	197.07	[2050-75-1]	50µg/mL	Isooctane	1	1mL
3112.10-50-IO	2,6-Dichloronaphthalene	PCN-11	197.07	[2065-70-5]	50µg/mL	Isooctane	1	1mL
3621.10-50-IO	2,7-Dichloronaphthalene	PCN-12	197.07	[2198-77-8]	50µg/mL	Isooctane	1	1mL
3744.10-50-IO	1,2,3,4-Tetrachloronaphthalene	PCN-27	265.95	[20020-02-4]	50µg/mL	Isooctane	1	1mL
3752.10-50-IO	Tetrachloronaphthalene, mix				50µg/mL	Isooctane	1	1mL
1998.10-50-IO	Octachloronaphthalene	PCN-75	403.74	[2234-13-1]	50µg/mL	Isooctane	1	1mL
3113.10-KIT	PCN Kit							Kit

PBNs (Polybromonaphthalenes)

NEW

3114.10-50-IO	1-Bromonaphthalene	PBN-1	207.07	[90-11-9]	50µg/mL	Isooctane	1	1mL
3115.10-50-IO	2-Bromonaphthalene	PBN-2	207.07	[580-13-2]	50µg/mL	Isooctane	1	1mL
3116.10-50-IO	1,4-Dibromonaphthalene	PBN-5	285.97	[83-53-4]	50µg/mL	Isooctane	1	1mL
3118.10-50-IO	2,6-Dibromonaphthalene	PBN-11	285.97	[13720-06-4]	50µg/mL	Isooctane	1	1mL

3119.10-50-IO	2,7-Dibromonaphthalene	PBN-12	285.97	[58556-75-5]	50μg/mL	Isooctane	1	1mL
8101.10-50-IO	1,2,3,4,6,7-Hexabromonaphthalene	PBM-66	661.55		50μg/mL	Isooctane	1	1mL
3120.6-KIT	PBN Kit							Kit

PCAs (Polychlorinated n-alkanes)

C8-C9 PCAs

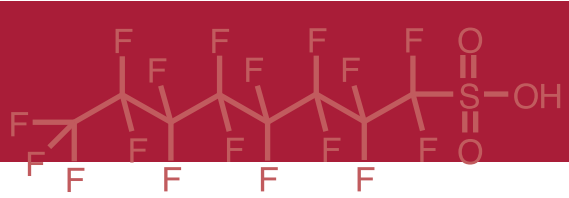
1664.8-K-IO	1,2-Dichlorooctane	183.12	[21948-46-9]	1000μg/mL	isooctane	1	1mL
1660.8-K-IO	1,1,1,3-Tetrachlorooctane	252.01	[18088-13-6]	1000μg/mL	isooctane	1	1mL
1672.8-K-IO	1,2,7,8-Tetrachlorooctane	252.01	[865306-19-0]	1000μg/mL	isooctane	1	1mL
1657.8	1,1,1,3,7,8-Hexachlorooctane	320.90		Please inquire			
1656.8-K-IO	1,1,1,3,6,8,8,8-Octachlorooctane	389.79	[61856-19-7]	1000μg/mL	isooctane	1	1mL
1665.9-K-IO	1,2-Dichlorononane	197.15	[56375-96-3]	1000μg/mL	isooctane	1	1mL
1661.9-K-IO	1,1,1,3-Tetrachlorononane	266.04	[1070-27-5]	1000μg/mL	isooctane	1	1mL
1673.9-K-IO	1,2,8,9-Tetrachlorononane	266.04	[865306-20-3]	1000μg/mL	isooctane	1	1mL
1658.9-K-IO	1,1,1,3,8,9-Hexachlorononane	334.93	[865306-21-4]	1000μg/mL	isooctane	1	1mL
1655.9	1,1,1,3,7,9,9,9-Octachlorononane	403.82	[13389-26-9]	Please inquire			
1883.8-KIT	C8-C9 PCA Kit (Not including 1657,8 and 1655,9)						Kit

C10-C13 PCAs (SCCA)

1666.10-K-IO	1,2-Dichlorodecane	211.18	[34619-32-4]	1000μg/mL	isooctane	1	1mL
1662.10-K-IO	1,1,1,3-Tetrachlorodecane	280.07	[51755-60-3]	1000μg/mL	isooctane	1	1mL
1671.10-K-IO	1,2,9,10-Tetrachlorodecane	280.07	[205646-11-3]	1000μg/mL	isooctane	1	1mL
1659.10-K-IO	1,1,1,3,9,10-Hexachlorodecane isomer mixture	348.96	[601523-26-6]	1000μg/mL	isooctane	1	1mL
1622.10-K-IO	1,1,1,3,8,10,10,10-Octachlorodecane	417.85	[601523-23-3]	1000μg/mL	isooctane	1	1mL
1667.11-K-IO	1,2-Dichloroundecane	225.20	[81246-86-8]	1000μg/mL	isooctane	1	1mL
1649.11-K-IO	1,1,1,3-Tetrachloroundecane	294.09	[56686-55-6]	1000μg/mL	isooctane	1	1mL
1674.11-K-IO	1,2,10,11-Tetrachloroundecane	294.09	[210049-49-3]	1000μg/mL	isooctane	1	1mL
1650.11-K-IO	1,1,1,3,10,11-Hexachloroundecane isomer mixture	362.98	[601523-28-8]	1000μg/mL	isooctane	1	1mL
1623.11-K-IO	1,1,1,3,9,11,11,11-Octachloroundecane	431.87	[601523-25-5]	1000μg/mL	isooctane	1	1mL
1668.12-K-IO	1,2-Dichlorododecane	239.23	[75121-23-2]	1000μg/mL	isooctane	1	1mL
1663.12-K-IO	1,12-Dichlorododecane	239.23	[3922-28-9]	1000μg/mL	isooctane	1	1mL
1651.12-K-IO	1,1,1,3-Tetrachlorododecane	308.12	[14983-60-9]	1000μg/mL	isooctane	1	1mL
1675.12-K-IO	1,2,11,12-Tetrachlorododecane	308.12	[210115-98-3]	1000μg/mL	isooctane	1	1mL
1652.12-K-IO	1,1,1,3,11,12-Hexachlorododecane isomer mixture	377.01	[865306-22-5]	1000μg/mL	isooctane	1	1mL
1624.12-K-IO	1,1,1,3,10,12,12,12-Octachlorododecane	445.90	[601523-21-1]	1000μg/mL	isooctane	1	1mL
1669.13-K-IO	1,2-Dichlorotridecane	253.26	[701920-72-1]	1000μg/mL	isooctane	1	1mL
1653.13-K-IO	1,1,1,3-Tetrachlorotridecane	322.15	[67095-50-5]	1000μg/mL	isooctane	1	1mL
1654.13-K-IO	1,1,1,3,12,13-Hexachlorotridecane isomer mixture	391.04	[865306-23-6]	1000μg/mL	isooctane	1	1mL
1625.13-K-IO	1,1,1,3,11,13,13,13-Octachlorotridecane	459.93	[865306-24-7]	1000μg/mL	isooctane	1	1mL
1884.20-KIT	C10-C13 PCA Kit						Kit

C14+ PCAs (MCCA)

1670.14-K-IO	1,2-Dichlorotetradecane	267.29	[701920-83-4]	1000μg/mL	isooctane	1	1mL
1676.14-K-IO	1,1,1,3-Tetrachlorotetradecane	336.18	[865306-25-8]	1000μg/mL	isooctane	1	1mL
1677.14-K-IO	1,2,13,14-Tetrachlorotetradecane	336.18	[221155-23-3]	1000μg/mL	isooctane	1	1mL
1678.14-K-IO	1,1,1,3,12,12,12,14-Octachlorotetradecane	473.96	[865306-26-9]	1000μg/mL	isooctane	1	1mL
2051.18-10K-DC	1-Chlorooctadecane	288.95	[3386-33-2]	10000μg/mL	dichloromethane	1	1mL
1885.5-KIT	C14 PCA Kit						Kit
1879.7-KIT	Dichloroalkane Kit						Kit
1880.13-KIT	Tetrachloroalkane Kit						Kit
1881.5-KIT	Hexachloroalkane Kit						Kit
1882.6-KIT	Octachloroalkane Kit						Kit



Chlorinated fatty acids

3746.18-100-ME	9-Chloro- /10-Chlorooctadecanoic acid	318.92		100µg/mL	methanol	1	1mL
3745.16-100-ME	7,8-Dichlorohexadecanoic acid	325.31	[129244-82-2]	100µg/mL	methanol	1	1mL
3622.18-100-ME	9,10-Dichlorooctadecanoic acid	353.37	[5829-48-1]	100µg/mL	methanol	1	1mL
3747.18-100-ME	9,10-/, 9,13-/, 10,12-/, 10,13-Dichlorooctadecane	323.38		100µg/mL	methanol	1	1mL
3748.18-100-ME	9,10,12,13-Tetrachlorooctadecanoic acid	422.26	[26533-39-1]	100µg/mL	methanol	1	1mL

PFAs (Perfluorinated alkane acids and alcohols) NEW

PFA Sulphonic acids

2041.4-50-ME	Perfluorobutane sulphonic acid	300.10	[59933-66-3]	50 ug/ml	methanol	1	1mL
2187.4-50-ME	Perfluorobutane sulphonylfluoride	302.09	[375-72-4]	50µg/mL	methanol	1	1mL
2719.4-50-ME	Perfluorobutane sulphonate, potassium salt	338.19	[29420-49-3]	50µg/mL	methanol	1	1mL
2186.6-50-ME	Perfluorohexane sulphonylfluoride	402.11	[423-50-7]	50µg/mL	methanol	1	1mL
2192.8-50-ME	Perfluoro-4-ethyl-cyclohexane sulphonic acid, potassium salt	484.23	[335-24-0]	50µg/mL	methanol	1	1mL
2037.8-50-ME	Perfluorooctane sulphonic acid	500.13	[1763-23-1]	50ug/ml	methanol	1	1mL
2193.8-50-ME	Perfluorooctane sulphonic acid, potassium salt	539.23	[2795-39-3]	50µg/mL	methanol	1	1mL

Telomeric PFA Sulphonic acid

2559.8-50-ME	1H,1H,2H,2H-Perfluorooctanesulphonic acid	428.17	[27619-97-2]	50µg/mL	methanol	1	1mL

PFA Sulphonamides

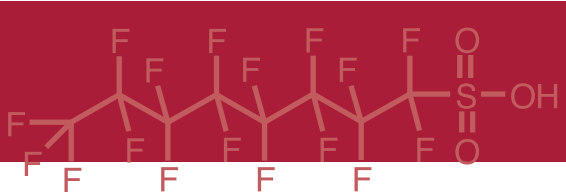
2043.8-50-AN	Perfluorooctane sulfonamide	499.15	[754-91-6]	50 ug/ml	acetonitrile	1	1mL

PFA Acids

2190.3-50-ME	Propanoic acid, pentafluoro-, sodium salt	170.01	[378-77-8]	50µg/mL	methanol	1	1mL
2810.4-50-ME	Heptafluorobutyric acid	214.04	[375-22-4]	50µg/mL	methanol	1	1mL
2189.4-50-ME	Butanoic acid, heptafluoro-, sodium salt	220.02	[2218-54-4]	50µg/mL	methanol	1	1mL
2834.5-50-ME	5H-Octafluoropentanoic acid 5H PFBA	246.06	[376-72-7]	50µg/mL	methanol	1	1mL
2819.5-50-ME	n-Nonafluoropentanoic acid PFPA	264.05	[2706-90-3]	50µg/mL	methanol	1	1mL
2590.6-50-ME	Perfluorohexanoic acid	314.06	[307-24-4]	50µg/mL	methanol	1	1mL
2820.7-50-ME	Perfluorocyclohexanoic acid PFCyHxA	326.07	[374-88-9]	50µg/mL	methanol	1	1mL
2835.7-50-ME	7H-Perfluoroheptanoic acid 7H PFHPA	346.07	[1546-95-8]	50µg/mL	methanol	1	1mL
2821.7-50-ME	n-Perfluoroheptanoic acid PFHpA	364.06	[375-85-9]	50µg/mL	methanol	1	1mL
2042.8-50-ME	n-Perfluorooctanoic acid	414.07	[335-67-1]	50µg/mL	methanol	1	1mL
2822.8-50-ME	n-Perfluorooctanoic acid, ammonium salt PFOA-NH4	429.11	[3825-26-1]	50µg/mL	methanol	1	1mL
2191.8-50-ME	Pentafluoropropionic acid sodium salt	464.13	[80308-98-1]	50µg/mL	methanol	1	1mL
2836.9-50-ME	9H-Perfluorononanoic acid 9H PFNA	446.09	[76-21-1]	50µg/mL	methanol	1	1mL
2715.9-50-ME	Perfluorononanoic acid PFNA	464.08	[375-95-1]	50µg/mL	methanol	1	1mL
2823.10-50-ME	n-Perfluorodecanoic acid PFDA	514.09	[335-76-2]	50µg/mL	methanol	1	1mL
2824.10-50-ME	Perfluoro-3,7-dimethyloctanoic acid PF3,7DiMeOA	514.09	[172155-07-6]	50µg/mL	methanol	1	1mL
2825.11-50-ME	11H-Perfluoroundecanoic acid 11H PFUndA	546.11	[1765-48-6]	50µg/mL	methanol	1	1mL
2874.11-50-ME	Perfluoroundecanoic acid PFUndA	564.10	[2050-94-8]	50µg/mL	methanol	1	1mL
2826.12-50-ME	n-Perfluorododecanoic acid PFDodA	614.10	[307-55-1]	50µg/mL	methanol	1	1mL
2827.14-50-ME	Perfluorotetradecanoic acid PFTedA	714.12	[376-06-7]	50µg/mL	methanol	1	1mL
2828.16-50-ME	Perfluorohexadecanoic acid PFHxdA	814.14	[67905-19-5]	50µg/mL	methanol	1	1mL
2829.18-50-ME	Perfluorooctadecanoic acid PFOdA	914.15	[16517-11-6]	50µg/mL	methanol	1	1mL

Telomeric acids

2830.6-50-ME	2H,2H,3H,3H-Perfluorohexanoic acid 3:3 FTCA	278.08	[356-02-5]	50µg/mL	methanol	1	1mL



2831.9-50-ME	2H,2H,3H,3H-Perfluorononanoic acid	6:3 FTCA	392.12	[27854-30-4]	50µg/mL	methanol	1	1mL
2832.9-50-ME	1H,1H-Perfluoro-3,5,5-trimethylhexanoic acid	3,5,5-TriMe 5:1 FTCA	464.08	[238403-51-5]	50µg/mL	methanol	1	1mL

Unsaturated telomeric acid

2833.6-50-ME	2H,3H-Perfluorohex-2-enoic acid	3:3 FTUCA	240.08	[37759-76-5]	50µg/mL	methanol	1	1mL

PFA Acid Internal standards

2834.5-50-ME	5H-Octafluoropentanoic acid	5H PFBA	246.06	[376-72-7]	50µg/mL	methanol	1	1mL
2835.7-50-ME	7H-Perfluoroheptanoic acid	7H PFHPA	346.07	[1546-95-8]	50µg/mL	methanol	1	1mL
2836.9-50-ME	9H-Perfluorononanoic acid	9H PFNA	446.09	[76-21-1]	50µg/mL	methanol	1	1mL
2825.11-50-ME	11H-Perfluoroundecanoic acid	11H PFUndA	546.11	[1765-48-6]	50µg/mL	methanol	1	1mL

PFA amides

2837.4-50-ME	Heptafluorobutyramide		213.06	[662-50-0]	50µg/mL	methanol	1	1mL
2838.8-50-ME	Perfluorooctanamide		412.10	[307-31-3]	50µg/mL	methanol	1	1mL

PFA alcohols

Telomeric alcohols

2839.4-50-ME	3,3,4,4,4-Pentafluorobutan-1-ol	2:2 FTOH	164.08	[54949-74-5]	50µg/mL	methanol	1	1mL
2860.5-50-ME	1H,1H,5H-Octafluoropentan-1-ol	5H 4:1 FTOH	232.07	[355-80-6]	50µg/mL	methanol	1	1mL
2841.6-50-ME	1H,1H,2H,2H,3H,3H-Perfluorohexan-1-ol	3:3 FTOH	228.11	[679-02-7]	50µg/mL	methanol	1	1mL
2842.6-50-ME	1H,1H-Perfluorohexan-1-ol	5:1 FTOH	300.07	[423-46-1]	50µg/mL	methanol	1	1mL
2861.7-50-ME	1H,1H,7H-Perfluoroheptan-1-ol	7H 6:1 FTOH	332.09	[335-99-9]	50µg/mL	methanol	1	1mL
2843.7-50-ME	1H,1H-Perfluoroheptan-1-ol	6:1 FTOH	350.08	[375-82-6]	50µg/mL	methanol	1	1mL
2147.8-50-ME	1H,1H,2H,2H-Perfluorooctan-1-ol	6:2 FTOH	364.11	[647-42-7]	50µg/mL	methanol	1	1mL
2146.8-50-ME	1H,1H,8H-Perfluorooctane-1-ol	8H 7:1 FTOH	382.10	[10331-08-5]	50µg/mL	methanol	1	1mL
2145.8-50-ME	1H,1H-Perfluorooctane-1-ol	7:1 FTOH	400.09	[307-30-2]	50µg/mL	methanol	1	1mL
2844.9-50-ME	1H,1H,2H,2H,3H,3H-Perfluorononan-1-ol	6:3 FTOH	378.13	[80806-68-4]	50µg/mL	methanol	1	1mL
2847.9-50-ME	1H,1H,2H,2H-Perfluoro-7-methyloctan-1-ol	7Me 6:1 FTOH	414.12	[20015-46-7]	50µg/mL	methanol	1	1mL
2846.9-50-ME	1H,1H,9H-Perfluorononan-1-ol	9H 8:1 FTOH	432.11	[376-18-1]	50µg/mL	methanol	1	1mL
2845.9-50-ME	1H,1H-Perfluorononan-1-ol	8:1 FTOH	450.10	[423-56-3]	50µg/mL	methanol	1	1mL
2851.10-50-ME	1H,1H,10H,10H-Perfluoro-1,10-decanediol	1:8:1 FTdiOH	462.13	[754-96-1]	50µg/mL	methanol	1	1mL
2849.10-50-ME	1H,1H,2H,2H-Perfluorodecan-1-ol	8:2 FTOH	464.12	[678-39-7]	50µg/mL	methanol	1	1mL
2848.10-50-ME	1H,1H-Perfluorodecan-1-ol	9:1 FTOH	500.10	[307-37-9]	50µg/mL	methanol	1	1mL
2850.10-50-ME	1H,1H-Perfluoro-3,7-dimethyloctane-1-ol	3,7-DiMe 7:1 FTOH	500.10	-	50µg/mL	methanol	1	1mL
2854.11-50-ME	1H,1H,2H,2H-Perfluoro-9-methyldecan-1-ol	9Me 8:2 FTOH	514.13	[31200-98-3]	50µg/mL	methanol	1	1mL
2853.11-50-ME	1H,1H,11H-Perfluoroundecan-1-ol	11H 10:1 FTOH	532.12	[307-70-0]	50µg/mL	methanol	1	1mL
2852.11-50-ME	1H,1H-Perfluoroundecan-1-ol	10:1 FTOH	550.11	[307-46-0]	50µg/mL	methanol	1	1mL
2767.12-50-ME	1H,1H,2H,2H-Perfluorododecan-1-ol	10:2 FTOH	564.14	[865-86-1]	50µg/mL	methanol	1	1mL
3821.13-50-ME	1H,1H,13H-Perfluorotridecan-1-ol	13H 12:1 FTOH	631.13	[423-72-3]	50µg/mL		1	1mL
2855.14-50-ME	1H,1H-Perfluorotetradecan-1-ol	13:1 FTOH	700.14	[15622-57-8]	50µg/mL	methanol	1	1mL
2856.16-50-ME	1H,1H-Perfluorohexadecan-1-ol	15:1 FTOH	800.15	[216144-94-4]	50µg/mL	methanol	1	1mL
2857.18-50-ME	1H,1H-Perfluorooctadecan-1-ol	17:1 FTOH	900.17	[242142-82-1]	50µg/mL	methanol	1	1mL

Allylic alkohols

2858.6-50-ME	1H,1H,2H,3H-Perfluorohex-2-en-1-ol	Allylic 3:3 FTOH	226.09	[37759-88-9]	50µg/mL	methanol	1	1mL
2859.9-50-ME	1H,1H,2H,3H-Perfluorononon-2-en-1-ol	Allylic 6:3 FTOH	376.12	[38550-47-9]	50µg/mL	methanol	1	1mL

Internal Standards

2860.5-50-ME	1H,1H,5H-Octafluoropentan-1-ol	5H 4:1 FTOH	232.07	[355-80-6]	50µg/mL	methanol	1	1mL
2861.7-50-ME	1H,1H,7H-Perfluoroheptan-1-ol	7H 6:1 FTOH	332.09	[335-99-9]	50µg/mL	methanol	1	1mL
2146.8-50-ME	1H,1H,8H-Perfluorooctane-1-ol	8H 7:1 FTOH	382.10	[10331-08-5]	50µg/mL	methanol	1	1mL

PFA aldehydes

2862.7-50-ME	7H-Perfluoroheptanal		330.07	[647-44-9]	50µg/mL	methanol	1	1mL

VOC (Volatile organic compounds)

3950.1-1ML	Bromochloromethane		129.38	[75-97-5]	neat		1	1mL
2882.2-1ML	2-Bromo-2-chloro-1,1,1-trifluoroethane		197.38	[151-67-7]	neat		1	1mL
1690.1-1ML	Bromodichloromethane, in Certan bottle		163.83	[75-27-4]	neat		1	1mL
3933.6-1ML	2-Bromofluorobenzene		175.00	[1072-85-1]	neat		1	1mL
1689.1-1ML	Bromoform, in Certan bottle		252.73	[75-25-2]	neat		1	1mL
0186.1-1ML	Carbon disulfide, in Certan bottle		76.14	[75-15-0]	neat		1	1mL
1691.1-1ML	Chlorodibromomethane, in Certan bottle		208.28	[124-48-1]	neat		1	1mL
1350.1-1ML	Chloroform, in Certan bottle		119.38	[67-66-3]	neat		1	1mL
1397.6-1ML	5-Chloro-2-methylaniline		141.60	[95-79-4]	neat		1	1mL
3941.3-1ML	3-Chloropropane		76.52	[107-05-1]	neat		1	1mL
3959.7-1ML	2-Chlorotoluene		126.59	[95-49-8]	neat		1	1mL
3960.7-1ML	4-Chlorotoluene		126.59	[106-43-4]	neat		1	1mL
3963.3-1ML	1,2-Dibromo-3-chloropropane		256.33	[76-12-8]	neat		1	1mL
3953.1-1ML	Dibromomethane		173.83	[74-95-3]	neat		1	1mL
3932.4-1ML	1,4-Dichlorobutane		127.01	[110-56-5]	neat		1	1mL
2256.2-1ML	1,2-Dibromoethane, in Certan bottle		187.86	[106-93-4]	neat		1	1mL
3929.2-1ML	1,1-Dichloroethane		98.96	[75-34-3]	neat		1	1mL
1355.2-1ML	1,2-Dichloroethane, in Certan bottle		98.96	[107-06-2]	neat		1	1mL
2260.2-1ML	1,1-Dichloroethylene, in Certan bottle	Vinylidene chloride	96.94	[75-35-4]	neat		1	1mL
3939.2-1ML	cis-1,2-Dichloroethene		96.94	[156-59-2]	neat		1	1mL
3940.2-1ML	trans-1,2-Dichloroethene		96.94	[156-60-5]	neat		1	1mL
3944.1-1ML	Dichlorodifluoromethane		120.91	[75-71-8]	neat		1	1mL
2554.1-1ML	Dichloromethane, in Certan bottle		84.93	[75-09-2]	neat		1	1ml
3935.3-ML	1,2-Dichloropropane		112.99	[78-87-5]	neat		1	1mL
3954.3-1ML	1,3-Dichloropropane		112.99	[142-28-9]	neat		1	1mL
3951.3-1ML	2,2-Dichloropropane		112.99	[594-20-7]	neat		1	1mL
3952.3-1ML	1,1-Dichloropropene		110.97	[563-58-6]	neat		1	1mL
3937.3-1ML	cis-1,3-Dichloropropene		110.97	[10061-01-5]	neat		1	1mL
3938.3-1ML	trans-1,3-Dichloropropene		110.97	[10061-02-6]	neat		1	1mL
3942.6-1ML	1,4-Fluoropropane		114.09	[540-36-3]	neat		1	1mL
2027.4-K-IO	Hexachloro-1,3-butadiene		260.76	[87-68-3]	1000µg/mL	isooctane	1	1mL
1688.0-2K-T	Hydrogensulfide		34.08	[7783-06-4]	2000µg/mL	toluene	1	1mL
3946.1-1mL	Monobromomethane		94.94	[74-83-9]	neat		1	1mL
3943.6-1ML	Monochlorobenzene-d5		225.12	[3114-55-4]	neat		1	1mL
3947.2-1ML	Monochloroethane		64.51	[75-00-3]	neat		1	1mL
3945.1	Monochloromethane		50.94	[74-87-3]	Please inquire, sylinder			
1352.1-1ML	Tetrachloromethane		153.82	[56-23-59	neat		1	1mL
1353.2-1ML	Tetrachloroethylene, in Certan bottle		165.83	[127-18-4]	neat		1	1mL
3955.2-1ML	1,1,1,2-Tetrachloroethane		167.85	[630-20-6]	neat		1	1mL
3957.2-1ML	1,1,2,2-Tetrabromoethane		345.65	[79-27-6]	neat		1	1mL

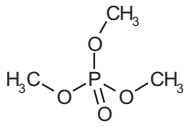
3934.2-ML	1,1,2-Trichloroethane	133.40	[79-00-5]	neat		1	1mL
1354.2-1ML	Trichloroethylene, in Certan bottle	131.39	[79-01-6]	neat		1	1mL
1351.2-1ML	1,1,1-Trichloroethane, in Certan bottle	133.41	[71-55-6]	neat		1	1mL
3948.1-ML	Trichlorofluoromethane	137.37	[75-69-4]	neat		1	1mL
3936.3-1ML	1,2,3-Trichloropropane	147.43	[96-18-4]	neat		1	1mL
2890.2-2K-ME	Vinyl chloride	62.50	[75-01-4]	2000µg/mL	methanol	1	1mL

Phosphates (Hydraulic fluids)

NEW

1400.3 **Trimethyl phosphate**

[512-56-1] MW 140.08



1400.3-K-IO 1000µg/mL isooctane, 1x1mL

8026.6 **Triethyl phosphate**

[78-40-0] MW 182.16

8026.6-K-IO 1000µg/mL isooctane, 1x1mL

8027.6 **Tri-n-propyl phosphate**

[513-08-6] MW 224.24

8027.6-K-IO 1000µg/mL isooctane, 1x1mL

1399.12 **Tri-n-butyl phosphate**

[126-73-8] MW 266.32

1399.12-K-IO 1000µg/mL isooctane, 1x1mL

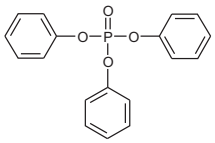
3966.12 **Triisobutyl phosphate**

[126-71-6] MW 266.32

3966.12-K-IO 1000µg/mL isooctane, 1x1mL

2138.18 **Triphenyl phosphate**

[115-86-6] MW 326.29



2138.18-K-IO 1000µg/mL isooctane, 1x1mL

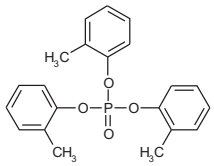
3967.19 **Tolyldiphenyl phosphate**

[26444-49-5]

3967.19-K-IO 1000µg/mL isooctane, 1x1mL

2135.21 **Tri-o-tolyl phosphate**

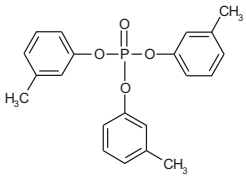
[78-30-8] MW 368.37



2135.21-K-IO 1000µg/mL isooctane, 1x1mL

2134.21 **Tri-m-tolyl phosphate**

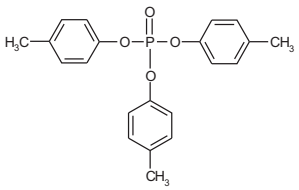
[563-04-2] MW 368.37



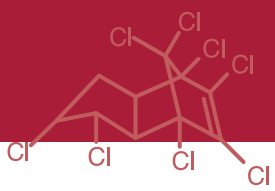
2134.21-K-IO 1000µg/mL isooctane, 1x1mL

2136.21 **Tri-p-tolyl phosphate**

[78-32-0] MW 368.37



2136.21-K-IO 1000µg/mL isooctane, 1x1mL



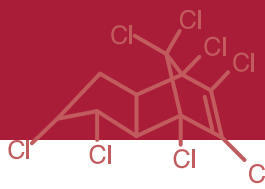
2137.21	**Tritolyl phosphate (isomer mix)** [1330-78-5] MW 368.37							
2137.21-K-IO	1000µg/mL isooctane, 1x1mL							

3687.11	**Phosphate Kit**							
3687.11-KIT	Kit							

Pesticides

Isotope labelled pesticides

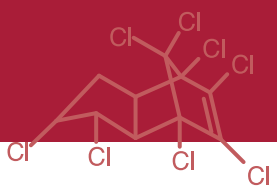
2916.14-100	Acetochlor-d11 (2-ethyl-6-methylphenyl-d11)		269.77	[34256-82-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2917.14-100-IO	Alachlor -d13 (2,6-diethylphenyl-d13)		269.77	[15972-60-8]	100µg/mL	isooctane	1	1mL
2918.8-100-IO	Atrazine-d5 (ethyl-d5)		220.72	[163165-75-1]	100µg/mL	isooctane	1	1mL
2919.12-100-IO	Carbaryl-d7 (naphtyl-d7)		208.27	[362049-56-7]	100µg/mL	isooctane	1	1mL
2920.12-100-IO	Carbofuran-d3 (N-methyl-d3)		224.26		100µg/mL	isooctane	1	1mL
2921.9-100-IO	4-Chloro-2-methylphenoxy-d3-acetic Acid	MCPA	203.64	[352431-14-2]	100µg/mL	isooctane	1	1mL
2922.10-100-IO	2-(4-Chloro-2-methylphenoxy-d3) propionic acid	Mecoprop	217.67	[352431-15-3]	100µg/mL	isooctane	1	1mL
2923.9-100-IO	Chlorpyriphos-d10 (O,O-diethyl-d10)		360.64	[285138-81-0]	100µg/mL	isooctane	1	1mL
2924.9-100-IO	Cyanazine-d5 (N-ethyl-d5)		245.73		100µg/mL	isooctane	1	1mL
2925.7-100-IO	Desethylterbuthylazine-d9 (tert-butyl-d9)		210.71		100µg/mL	isooctane	1	1mL
2926.5-100-IO	Desisopropylatrazine-d5 (ethyl-d5)		178.64		100µg/mL	isooctane	1	1mL
2927.12-100-IO	Diazinon-d10 (diethyl-d10)		314.40	[100155-47-3]	100µg/mL	isooctane	1	1mL
2928.7-100-IO	3,5-Dibromo-4-hydroxybenzonitrile-2,6-d2	Bromoxynil	278.93	[1689-84-5]	100µg/mL	isooctane	1	1mL
2929.14-100-IO	1,1-Dichloro-2,2-bis (4-Chlorophenyl-d4)ethane	4,4'-DDD	328.09	[93952-20-6]	100µg/mL	isooctane	1	1mL
2930.14-100-IO	1,1-Dichloro-2,2-bis (4-Chlorophenyl-d4)ethylene	4,4'-DDE	326.08	[93952-19-3]	100µg/mL	isooctane	1	1mL
2931.8-100-IO	3,6-Dichloro-2-methoxy-d3-benzoic Acid	Dicamba	224.06	[349553-95-3]	100µg/mL	isooctane	1	1mL
2932.8-100-IO	2,4-Dichlorophenoxy-3,5,6-d3-acetic Acid	2,4-D	224.06	[202480-67-9]	100µg/mL	isooctane	1	1mL
2933.8-100-IO	2,4-Dichlorophenoxy-3,5,6-d3-acetic-d2 Acid	2,4-D	226.07	[352438-69-8]	100µg/mL	isooctane	1	1mL
2934.10-100-IO	4-(2,4-Dichlorophenoxy-3,5,6-d3) butyric Acid	2,4-DB	252.09		100µg/mL	isooctane	1	1mL
2935.4-100-IO	Dichlorvos-d6 (dimethyl-d6)		226.98	[203645-53-8]	100µg/mL	isooctane	1	1mL
2936.19-100-IO	Diflufenican-d3 (3-trifluoromethylphenoxy-2,4,6-d3)		397.32		100µg/mL	isooctane	1	1mL
2937.5-100-IO	Dimethoate-d6 (O,O-dimethyl-d6)		235.28		100µg/mL	isooctane	1	1mL
2938.6-100-IO	Dimethyl-d6 tetrachloroterephthalate	Dacthal	338.00	[350818-66-5]	100µg/mL	isooctane	1	1mL
2939.12-100-IO	Diquat dibromide-d4		362.10	[6385-62-2]	100µg/mL	isooctane	1	1mL
2940.9-100-IO	Diuron-d6 (dimethyl-d6)		239.13		100µg/mL	isooctane	1	1mL
2941.9-100-IO	Endosulfan-I-d4		410.95	[203645-57-2]	100µg/mL	isooctane	1	1mL
2942.9-100-IO	Endosulfan-II-d4		410.95	[203716-99-8]	100µg/mL	isooctane	1	1mL
2943.9-100-IO	EPTC-d14 (dipropyl-d14)		203.40	[759-94-4]	100µg/mL	isooctane	1	1mL
2944.14-100-IO	Ethyl viologen-d8 dichloride (rings-d8)		293.26		100µg/mL	isooctane	1	1mL
2945.9-100-IO	Fenitrooxon-d6 (O,O-dimethyl-d6)		267.21		100µg/mL	isooctane	1	1mL
2946.9-100-IO	Fenitrothion-d6 (O,O-dimethyl-d6)		75.08	[203645-59-4]	100µg/mL	isooctane	1	1mL



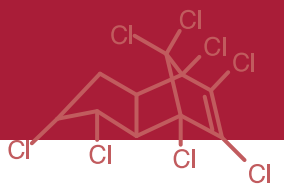
2947.10-100-IO	Fenthion-d6 (O,O-dimethyl-d6)	284.36		100µg/mL	isooctane	1	1mL
2948.6-100-IO	a-1,2,3,4,5,6-Hexachlorocyclohexane-d6	296.87	[86194-41-4]	100µg/mL	isooctane	1	1mL
2949.6-100-IO	gamma-1,2,3,4,5,6-Hexachlorocyclohexane-d6 Lindane	296.87	[60556-82-3]	100µg/mL	isooctane	1	1mL
2950.13-100-IO	Iprodione-d3(3,5-dichlorophenyl-2,4,6-d3)	333.19		100µg/mL	isooctane	1	1mL
2951.12-100-IO	Isoproturon-d3 (N-methyl-d3)	209.31	[352438-80-3]	100µg/mL	isooctane	1	1mL
2952.9-100-IO	Linuron-d6 (dimethyl-d6)	255.13		100µg/mL	isooctane	1	1mL
2953.10-100-IO	Malathion-d6 (dimethyl-d6)	336.39		100µg/mL	isooctane	1	1mL
2954.10-100-IO	Malathion-d7 (dimethyl-d6;3-d1)	337.39		100µg/mL	isooctane	1	1mL
2955.10-100-IO	Malathion-d10 (diethyl-d10)	340.41	[347841-48-9]	100µg/mL	isooctane	1	1mL
2956.2-100-IO	Methamidophos-d6 (dimethyl-d6)	147.16		100µg/mL	isooctane	1	1mL
2957.9-100-IO	Methyl 2,4-dichlorophenoxy-3,5,6-d3-acetate 2,4-D methyl ester	238.08	[358731-20-1]	100µg/mL	isooctane	1	1mL
2958.8-100-IO	Methyl parathion-d6 (dimethyl-d6)	269.24	[96740-32-8]	100µg/mL	isooctane	1	1mL
2959.12-100-IO	Methyl viologen-d8 dichloride (rings-d8) Paraquat Dichloride	265.21	[347841-45-6]	100µg/mL	isooctane	1	1mL
2960.15-100-IO	Metolachlor-d6 (propyl-d6)	289.83		100µg/mL	isooctane	1	1mL
2961.10-100-IO	Parathion-d10 (diethyl-d10)	301.32	[350820-04-1]	100µg/mL	isooctane	1	1mL
2962.13-100-IO	Pendimethalin-d5 [N-(1-ethyl-1`,1`-d2;propyl-1,2,2-d3)]	286.34		100µg/mL	isooctane	1	1mL
2963.7-100-IO	Phorate-d10 (O,O-diethyl-d10)	258.34	[298-02-2]	100µg/mL	isooctane	1	1mL
2964.9-100-IO	Propazine-d14 (di-iso-propyl-d14)	243.80		100µg/mL	isooctane	1	1mL
2965.11-100-IO	Propoxur-d3 (N-methyl-d3)	212.26		100µg/mL	isooctane	1	1mL
2966.12-100-IO	Propyzamide-d3 (phenyl-2,4,6-d3)	259.15		100µg/mL	isooctane	1	1mL
2967.7-100-IO	Simazine-d10 (diethyl-d10)	211.72	[220621-39-6]	100µg/mL	isooctane	1	1mL
2968.16-100-IO	Temephos-d12 (O,O,O',O'-tetramethyl-d12)	478.53		100µg/mL	isooctane	1	1mL
2969.9-100-IO	Terbuthylazine-d5 (ethyl-d5)	234.74	[222986-60-9]	100µg/mL	isooctane	1	1mL
2970.12-100-IO	Thiobencarb-d10 (diethyl-d10)	267.84		100µg/mL	isooctane	1	1mL
2971.14-100-IO	1,1,1-Trichloro-2,2-bis (4-chlorophenyl-d4)ethane 4,4'-DDT	362.54	[93952-18-2]	100µg/mL	isooctane	1	1mL
2972.14-100-IO	1,1,1-Trichloro-2(2-chlorophenyl-d4)-2-(4-chlorophenyl-d4)ethane 2,4'-DDT	362.54	[221899-88-3]	100µg/mL	isooctane	1	1mL
2973.8-100-IO	2,4,5-Trichlorophenoxy-3,6-d2-acetic-d2 Acid 2,4,5-T	199.46	[358731-37-0]	100µg/mL	isooctane	1	1mL
2974.14-100-IO	Trifluralin-d14 (di-n-propyl-d14)	349.37	[347841-79-6]	100µg/mL	isooctane	1	1mL

Pesticides (native)

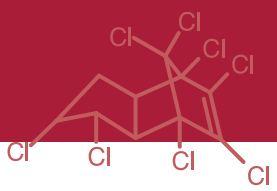
2975.4-100	Acephate Orthene	183.16	[30560-19-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2976.12-100	Aclonifen	264.70	[74070-46-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2977.14-100	Alachlor Lasso	269.77	[15972-60-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2978.7-100	Aldicarb	190.26	[116-06-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2979.7-100	Aldicarb sulfone Temic	222.29	[1646-88-4]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2980.7-100	Aldicarb sulfoxide	206.29	[1646-87-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2774.12-100	Aldrin	364.92	[309-00-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3309.19-100	Allethrin	302.40	[584-79-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3310.9-100	Ametryne	227.33	[834-12-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3311.9-100	Anilazine	275.72	[101-05-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2768.8-100	Atrazine	215.69	[1912-24-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2772.6-100	Atrazine-desethyl	187.63	[6190-65-4]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2773.5-100	Atrazine-desisopropyl	173.61	[1007-28-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3313.10-100	Azinphos methyl	317.33	[86-50-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3314.10-100	Azinphos-methyl-oxon	301.27	[961-22-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3315.13-100	Benfluralin Balan	335.32	[1861-40-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3316.10-100	Bentazone	240.28	[25057-89-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3317.12-100	Benthiocarb Thiobencarb	257.77	[28249-77-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
	BHC: See HCH						
3322.14-100	Bifenox Modown	342.13	[42576-02-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3323.23-100	Bifenthrin	422.87	[82657-04-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3324.9-100	Bromacil	261.11	[314-40-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3325.7-100	Bromoxynil	276.91	[1689-84-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3326.10-100	Cadusafos	270.42	[95465-99-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3327.10-100	Captafol	349.06	[2425-06-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL



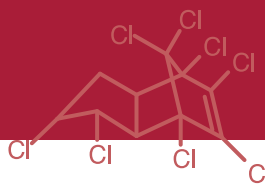
3328.9-100	Captan	300.58	[133-06-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3329.12-100	Carbaryl Sevin	201.24	[63-25-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2311.12-100	Carbofuran	221.26	[1563-66-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3331.12-100	Carbofuran-3-hydroxy	237.25	[16655-82-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2662.10-2K-ME	Chlordane	409.78	[57-74-9]	2000µg/mL	methanol	1	1mL
2662.10-100	Chlordane	409.78	[57-74-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3334.10-100	Chlordane, cis-alpha	409.78	[5103-71-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3335.10-100	Chlordane, oxy	423.80	[27304-13-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3336.10-100	Chlordane, trans-gamma	409.78	[5103-74-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3337.12-100	Chlorfenson	303.16	[80-33-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3338.12-100	Chlorfenvinphos	359.58	[470-90-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3339.5-100	Chlormephos	234.71	[24934-91-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3341.16-100	Chlorobenzilate	325.19	[510-15-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3340.7-100	4-Chlorobenzyl mercaptan	158.64	[6258-66-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3342.8-100	Chlorothalonil	265.91	[1897-45-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2313.15-100	Chloroxuron	290.75	[1982-47-4]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3343.10-100	Chlorpropham	213.66	[101-21-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3344.9-100	Chlorpyrifos Dursban,ethyl	350.58	[2921-88-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3345.7-100	Chlorpyrifos-methyl	322.50	[5598-13-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3346.6-100	Clopyralid	192.00	[1702-17-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3347.14-100	Coumaphos	362.76	[56-72-4]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3348.7-100	Crimidine	171.64	[535-89-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3349.9-100	Cyanazine	240.69	[21725-46-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3350.22-100	beta-Cyfluthrin	434.29	[68359-37-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3351.22-100	beta-Cypermethrin	416.32	[65731-84-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3352.22-100	Cypermethrin	416.30	[52315-07-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2319.15-100	Cyproconazole	291.78	[113096-99-4]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3353.8-100	2,4-D	221.04	[94-75-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3386.9-100	2,4-D methyl ester	235.07	[1928-38-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3354.10-100	2,4-DB	249.09	[94-82-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3355.11-100	2,4-DB methyl ester	263.12	[18625-12-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3357.14-100	2,4'-DDD (=TDE) o,p'-DDD	320.05	[53-19-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3356.14-100	4,4'-DDD (=TDE) p,p'-DDD	320.05	[72-54-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3361.14-100	2,4'-DDE o,p'-DDE	318.02	[3424-82-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3362.14-100	4,4'-DDE p,p'-DDE	318.02	[72-55-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3363.14-100	2,4'-DDT o,p'-DDT	354.49	[789-02-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2028.14-100	4,4'-DDT p,p'-DDT	354.49	[50-29-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2028.14-K-IO	4,4'-DDT p,p'-DDT	354.49	[50-29-3]	1000µg/mL	isooctane	1	1mL
3367.22-100	Deltamethrin	505.24	[52918-63-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3368.8-100	Demeton S Systox	258.36	[126-75-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2779.12-100	Diazinon	304.35	[333-41-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3369.8-100	Dicamba	221.03	[1918-00-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3370.7-100	Dichlobenil Casaron	172.02	[1194-65-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3371.10-100	Dichlofenthion	315.15	[97-17-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3372.9-100	Dichlofluanid	333.24	[1085-98-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3373.10-100	Dichlone	227.04	[117-80-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3374.6-100	Dichloran Botran	207.02	[81859-29-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3375.9-100	Dichlorprop	235.07	[120-36-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3376.10-100	Dichlorprop methyl ester	249.09	[23844-57-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3377.4-100	Dichlorvos	220.98	[62-73-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2107.7-100	Diclobenil 2,6-Dichlorobenzonitrile	172.01	[1194-65-6]	100µg/mL	c.hexane or ac.nitrile	1	10mL
3378.14-100	Dicofol Kaltane	370.51	[115-32-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3379.8-100	Dicrotophos Didrin	237.22	[141-66-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2775.12-100	Dieldrin	380.91	[60-57-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3380.19-100	Diflufenican	394.30	[83164-33-4]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3381.5-100	Dimethoate Cygon	229.27	[60-51-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2144.10-100	Dinoseb 2-sec-Butyl-4,6-dinitrophenol	240.22	[88-85-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2144.10-K-IO	Dinoseb 2-sec-Butyl-4,6-dinitrophenol	240.22	[88-85-7]	1000µg/mL	isooctane	1	1mL
2144.10-K-IP	Dinoseb 2-sec-Butyl-4,6-dinitrophenol	240.22	[88-85-7]	1000µg/mL	isopropanol	1	1mL



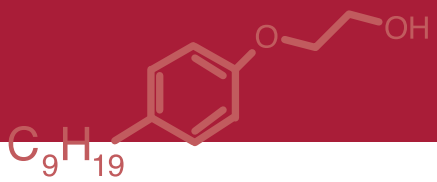
2483.10-100	Dinoterb 2-tert-Butyl-4,6-dinitrophenol		240.22	[1420-07-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3382.12-100	Dioxathion	Delnav	424.38	[78-34-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3383.12-100	Diphenylamine		169.24	[122-39-4]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3384.12-100	Diquat Dibromide monohydrate	Naled	362.10	[6385-62-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3385.8-100	Disulfoton	Disyston	274.42	[298-04-4]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2316.9-100	Diuron		233.10	[330-54-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2316.9-K-IO	Diuron		233.10	[330-54-1]	1000µg/mL	isooctane	1	1mL
3391.9-100	Endosulfan	Thiodan I	406.91	[115-29-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3387.9-100	alpha-Endosulfan		406.93	[959-98-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3388.9-100	beta-Endosulfan		406.91	[33213-65-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3390.9-100	Endosulfan alcohol		360.87	[2157-19-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3392.9-100	Endosulfan sulfate		422.93	[1031-07-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
1892.12-100	Endrin		380.91	[72-20-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
1892.12-K-IO	Endrin		380.91	[72-20-8]	1000µg/mL	isooctane	1	1mL
3393.14-100	EPN		323.32	[2104-64-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2321.17-100	Epoxiconazole		329.76	[133855-98-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3394.25-100	Esfenvalerate	Asana	419.90	[66230-04-4]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3395.13-100	Ethalfluralin	Sonalan	333.30	[55283-68-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2780.9-100	Ethion		384.48	[563-12-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3396.8-100	Ethoprop	Mocap,Ethoprophos	242.30	[13194-48-4]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2481.9-100-IP	Etinofen 2-Ethoxymethyl-4,6-dinitrophenol		242.19	[2544-94-7]	100µg/mL	isopropanol	1	1mL
2481.9-K-IP	Etinofen 2-Ethoxymethyl-4,6-dinitrophenol		242.19	[2544-94-7]	1000µg/mL	isopropanol	1	1mL
3397.13-100	Fenamiphos sulfoxide	Nemacur	319.36	[31972-43-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2781.9-100	Fenitrothion		277.24	[122-14-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3399.9-100	Fenoprop		269.51	[93-72-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3400.10-100	Fenoprop methyl ester		283.54	[4841-20-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3401.22-100	Fenpropathrin		349.46	[64257-84-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3402.12-100	Fenson		268.70	[80-38-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3403.10-100	Fenthion	Baytex	378.34	[55-38-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3404.9-100	Fenuron		164.23	[101-42-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3405.25-100	Fenvalerate		419.91	[51630-58-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3406.9-100	Ferbam		416.51	[14484-64-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3408.15-100	Fluazifop		327.30	[69335-91-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3409.10-100	Fluometuron		232.23	[2164-17-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3410.12-100	Flurochloridone		312.12	[61213-25-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3407.26-100	tau-Fluvalinate		502.95	[102851-06-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3411.9-100	Folpet		296.55	[133-07-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3412.10-100	Fonofos	Dyfonate	246.34	[944-22-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3413.16-100	Haloxyfop		391.73	[69806-34-4]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3319.6-100	alpha-HCH (BHC)	Benzahex	290.80	[319-84-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3415.6-100	beta-HCH (BHC)		290.82	[319-85-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2026.6-100	gamma-HCH (BHC)	Lindane	290.80	[58-89-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2026.6-10-10AN	gamma-HCH Lindane		290.83	[58-89-9]	10 ug/ml	acetonitrile	1	10mL
3321.6-100	delta-HCH (BHC)		290.82	[319-86-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3318.6-100	epsilon-HCH (BHC), (100ug/ml in toluene)		290.82	[6108-10-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2776.10-100	Heptachlor		373.32	[76-44-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2777.10-100	Heptachlor-endo-epoxide (trans-) isomer A		389.32	[1024-57-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2778.10-100	Heptachlor-exo-epoxide (cis-) isomer B		389.32	[28044-83-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
1356.6-100	Hexachlorobenzene		284.76	[118-74-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
1810.13-50-IO	Hexachlorophene		406.91	[70-30-4]	50µg/mL	isooctane	1	1mL
3420.12-100	Hexazinone		252.32	[51235-04-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3421.14-100	Imazalil		297.20	[35554-44-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3423.7-100	Ioxynil		370.92	[1689-83-4]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3424.13-100	Iprodione	Rovral	330.19	[36734-19-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3425.9-100	Isobenzan		411.73	[297-78-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL



3426.12-100	Isodrin	364.90	[465-73-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3427.15-100	Isofenphos	345.43	[25311-71-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3428.12-100	Isofenphos-des-N-isopropyl Oftanol	303.30	[25205-08-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2312.12-100	Isoproturon	206.29	[34123-59-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2026.6-100	Lindane: see gamma-HCH	290.83	[58-89-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2026.6-K-IO	Lindane see gamma-HCH	290.83	[58-89-9]	1000µg/mL	isooctane	1	1mL
3422.11-100	Imidan Phosmet	317.33	[732-11-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2317.9-100	Linuron	249.10	[330-55-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
1396.10-100	Malathion	330.36	[121-75-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
1396.10-K-IO	Malathion	330.36	[121-75-5]	1000µg/mL	isooctane	1	1mL
3429.4-100	Mancozeb	265.28	[8018-01-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3430.4-100	Maneb Dithane M-22	365.30	[12427-38-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3431.9-100	MCPA	200.62	[94-74-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3432.10-100	MCPA-methyl ester	214.65	[2436-73-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3433.11-100	MCPB	228.70	[94-81-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3434.12-100	MCPB-methyl ester	242.70	[57153-18-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3435.10-100	Mecoprop	214.66	[7085-19-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3436.11-100	Mecoprop methyl ester	228.68	[23844-56-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3437.15-100	Metalaxyl Ridomyl	279.37	[57837-19-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3438.10-100	Metamitron	202.24	[41394-05-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3439.14-100	Metazachlor	277.76	[67129-08-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3441.10-100	Methabenzthiazuron	221.30	[18691-97-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3442.7-100	Methacrifos	240.21	[30864-28-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3443.2-100	Methamidophos	141.14	[10265-92-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3444.6-100	Methidathion Supracide	302.34	[950-37-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3445.11-100	Methiocarb Mesurol	225.35	[2032-65-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3440.5-100	DL-Methionine	149.21	[59-51-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3447.5-100	Methomyl Lannate	162.23	[16752-77-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3448.16-100	Methoxychlor	345.66	[72-43-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3446.16-100	o,p'-Methoxychlor	345.65	[30667-99-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3449.8-100	Methyl parathion	263.23	[298-00-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3451.16-100	Metiram	1088.70	[9006-42-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3452.9-100	Metobromuron	259.13	[3060-89-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3453.15-100	Metolachlor Dual	283.83	[51218-45-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3454.10-100	Metoxuron	228.70	[19937-59-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3455.8-100	Metribuzin Sencor	214.28	[21087-64-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3456.7-100	cis-Mevinphos Phosdrin	224.17	[26718-65-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3457.10-100	Mirex	545.55	[2385-85-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3458.9-100	Molinate Ordram	187.33	[2212-67-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2315.9-100	Monolinuron	214.65	[1746-81-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2314.9-100	Monuron	198.65	[150-68-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3459.15-100	Myclobutanil Rally	288.79	[88671-89-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3460.4-100	Nabam	256.34	[142-59-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3461.4-100	Naled Dibrom	380.80	[300-76-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2376.10-K-IP	1-Naphthol	144.17	[90-15-3]	1000µg/mL	isopropanaol	1	1mL
3463.12-100	Nitrofen TOK	284.10	[1836-75-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3465.12-100	Oxadiazon-hydroxy Ronstar	303.15		100µg/mL	c.hexane or ac.nitrile	1	1mL
3466.7-100	Oxamyl Vydate	219.29	[23135-22-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3467.15-100	Oxyfluorfen Goal	361.72	[42874-03-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2782.10-100	Parathion Parathion-ethyl	291.26	[56-38-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3470.8-100	Parathion methyl	263.21	[298-00-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3471.13-100	Pendimethalin	281.31	[40487-42-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3472.6-100	Pentachloroaniline	265.35	[527-20-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2025.6-100	Pentachlorobenzene	250.32	[608-93-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3474.6-100	Pentachloronitrobenzene Quintozene, PCNB	295.32	[82-68-8]	100ug/ml	acetonitrile	1	1mL
3476.21-100	Permethrin Ambush	391.31	[52645-53-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3477.18-100	Perthane Ethylan	307.28	[72-56-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3479.23-100	d-(cis-trans)-Phenothrin	350.49	[26002-80-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
1806.12-100	o-Phenylphenol	170.21	[90-43-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3480.7-100	Phorate Thimet	260.39	[298-02-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3481.7-100	Phorate-oxon	244.30	[2600-69-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3482.12-100	Phosalone	367.82	[2310-17-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL



3483.10-100	Phosphamidon		299.72	[13171-21-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3484.6-100	Picloram		241.46	[1918-02-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3485.11-100	Pirimicarb		238.30	[23103-98-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3486.11-100	Pirimiphos-methyl		305.30	[29232-93-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3487.15-100	Prochloraz		376.69	[67747-09-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3488.13-100	Procymidone		284.15	[32809-16-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3489.11-100	Profenofos	Curacron	373.60	[41198-08-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3490.14-100	Profluralin	Tolban	347.30	[26399-36-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3491.10-100	Prometryne		241.40	[7287-19-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2769.9-100	Propazine		229.71	[139-40-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3492.10-100	Propetamphos	Safrotin	281.30	[31218-83-4]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3493.10-100	Propham		179.24	[122-42-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2320.15-100	Propiconazole		342.23	[60207-90-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3494.11-100	Propoxur	Baygon	209.25	[114-26-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3496.12-100	Propyzamide		256.13	[23950-58-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3498.6-100	Quintozene		295.34	[82-68-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3499.22-100	Resmethrin		338.45	[10453-86-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3500.8-100	Ronnel	Fenchlorphos	321.54	[299-84-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3501.9-100	Sebuthylazine		229.70	[7286-69-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2770.7-100	Simazine		201.66	[122-34-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3503.8-100	2,4,5-T		255.50	[93-76-5]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3516.9-100	2,4,5-T-methyl ester		269.51	[1928-37-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2318.16-100	Tebuconazole		307.83	[107534-96-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3504.6-100	Tecnazene		260.89	[117-18-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3505.9-100	Terbacil		216.69	[5902-51-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2771.9-100	Terbuthylazine		229.71	[5915-41-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3506.7-100	Terbuthylazine-desethyl		201.66	[30125-63-4]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3507.10-100	Terbutryne		241.40	[886-50-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3656.6-100	1,2,4,5-Tetrachlorobenzene		215.89	[95-94-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3509.10-100	Tetrachlorvinphos		365.96	[22248-79-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3510.12-100	Tetradifon	Tedion	356.04	[116-29-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3511.19-100	Tetramethrin		331.45	[7696-12-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3512.12-100	Tetrasul		324.06	[2227-13-6]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3513.10-100	Thiabendazole		201.26	[148-79-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3514.8-100	Thionazin-O-analog	Zinophos	232.17	[7359-55-9]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3515.6-100	Thiram		240.44	[137-26-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2663.10-100	Toxaphene		413.80	[8001-35-2]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2663.10-100MG	Toxaphene		413.80	[8001-35-2]	neat		1	100mg
3517.14-100	Triadimefon		293.80	[43121-43-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3518.14-100	Triadimenol		295.80	[55219-65-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3519.6-100	1,2,4-Trichlorobenzene		181.45	[120-82-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3520.10-100	Trichloronate		333.60	[327-98-0]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3521.7-100	Triclopyr		256.47	[55335-06-3]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3522.9-100	Trietazine		229.75	[1912-26-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3523.13-100	Trifluralin		335.32	[1582-09-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2209.6-100-IO	Tris-(aziridinyl)-phosphineoxide	TEPA	173.16	[545-55-1]	100µg/mL	isooctane	1	1mL
2209.6-K-IO	Tris-(aziridinyl)-phosphineoxide	TEPA	173.16	[545-55-1]	1000µg/mL	isooctane	1	1mL
2209.6-10MG	Tris-(aziridinyl)-phosphineoxide	TEPA	173.16	[545-55-1]	neat		1	10mg
2209.6-100MG	Tris-(aziridinyl)-phosphineoxide	TEPA	173.16	[545-55-1]	neat		1	100mg
2209.6-1G	Tris-(aziridinyl)-phosphineoxide	TEPA	173.16	[545-55-1]	neat		1	1g
3524.12-100	Vinclozolin	Ronilan	286.12	[50471-44-8]	100µg/mL	c.hexane or ac.nitrile	1	1mL
3525.4-100	Zineb		275.73	[12122-67-7]	100µg/mL	c.hexane or ac.nitrile	1	1mL



Surfactants and phenols

NEW focus

Phenolethoxylates

Internal standards

	Deuterated and 13C labelled ethoxylates: Please inquire						
2327.14-100-IO	4-n-Octylphenol-d17	223.43		100µg/mL	isooctane	1	1mL
2414.15-K-5IP	4-n-Nonylphenol-2,3,5,6-d4-OD	225.39	[358730-95-7]	1000µg/mL	isopropanol	5	5mL
2414.15-K-5AC	4-n-Nonylphenol-2,3,5,6-d4-OD	225.39	[358730-95-7]	1000µg/mL	acetone	5	5mL

4-n-Octylphenol ethoxylates

1445.14-K-IO	4-n-Octylphenol	206.33	[1806-26-4]	1000µg/mL	isooctane	1	1mL
2286.16-K-IO	Ethylene glycol mono (p-n-octylphenyl)ether 4-n-Octylphenol EO	250.38	[51437-89-9]	1000µg/mL	isooctane	1	1mL
2287.18-K-IO	Diethylene glycol mono (p-n-octylphenyl)ether 4-n-Octylphenol 2EO	294.44	[51437-90-2]	1000µg/mL	isooctane	1	1mL
2309.20-K-IO	Triethylene glycol mono (p-n-octylphenyl)ether	338.49	[51437-91-3]	1000µg/mL	isooctane	1	1mL
3688.22-K-IO	Tetraethylene glycol mono (p-n-octylphenyl)ether	382.53	[51437-92-4]	1000µg/mL	isooctane	1	1mL
2367.4-KIT	n-Octylphenol EO Kit (Not including 3688.12)						Kit

4-tert-Octylphenol ethoxylates

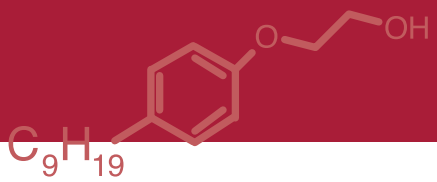
1446.14-K-IO	4-tert-Octylphenol	206.33	[140-66-9]	1000µg/mL	isooctane	1	1mL
3689.16-K-IO	4-tert-Octylphenol EO, Please inquire	250.38	[2315-67-5]	1000µg/mL	isooctane	1	1mL
3753.18-K-IO	4-tert-Octylphenol 2EO, Please inquire	294.43	[2315-61-9]	1000µg/mL	isooctane	1	1mL
3754.20-K-IO	4-tert-Octylphenol 3EO, Please inquire	338.48	[2315-62-0]	1000µg/mL	isooctane	1	1mL

Nonylphenol ethoxylates (nonylisomer mixtures)

2044.15-K-IO	4-Nonylphenol, mixture of nonyl isomers	220.36	[84852-15-3]	1000µg/mL	isooctane	1	1mL
1833.17-K-IO	Ethylene glycol mono(p-nonylphenyl) ether p-Nonylphenol EO	264.41	[104-35-8]	1000µg/mL	isooctane	1	1mL
1832.19-K-IO	Diethylene glycol mono(p-nonylphenyl) ether p-Nonylphenol 2EO	308.47	[20427-84-3]	1000µg/mL	isooctane	1	1mL
1976.21-K-IO	Triethylene glycol mono(p-nonylphenyl) ether isomer mix p-Nonylphenol 3EO	352.52	[51437-95-7]	1000µg/mL	Isooctane	1	1mL
1977.23-K-IO	Tetraethylene glycol mono(p-nonylphenyl) ether isomer mix p-Nonylphenol 4-EO	396.57	[7311-27-5]	1000µg/mL	Isooctane	1	1mL
2366.5-KIT	Nonylphenol EO Kit						Kit

4-n-Nonylphenol ethoxylates

1450.15-K-IO	4-n-Nonylphenol	220.36	[104-40-5]	1000µg/mL	isooctane	1	1mL
1978.17-K-IO	Ethylene glycol mono(p-n-nonylphenyl) ether p-n-Nonylphenol EO	264.41		1000µg/mL	Isooctane	1	1mL
1979.19-K-IO	Diethylene glycol mono(p-nonylphenyl) ether p-n-Nonylphenol 2EO	308.47	[20427-84-3]	1000µg/mL	Isooctane	1	1mL
3755.3-KIT	n-Nonylphenol ethoxylates Kit						Kit
1980.17-K-IO	2-(4-Nonylphenoxy)acetic acid isomer mixture	278.39	[3115-49-9]	1000µg/mL	Isooctane	1	1mL
S-4097-100MG	Imbentin-N/020 (n=0-4)			neat		1	100mg
S-4098-100MG	Imbentin-N/040 (n=1-7)			neat		1	100mg
S-4099-100MG	Imbentin-N/040 (n=2-9)			neat		1	100mg
2368.3-KIT	Imbentin Kit						Kit



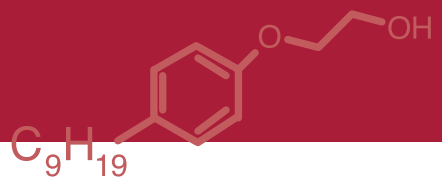
Phenols

F-Phenol internal standards

2057.6-K-IP	2-Fluorophenol	112.10	[367-12-4]	1000µg/mL	isopropanol	1	1mL
2057.6-1G	2-Fluorophenol	112.10	[367-12-4]	neat		1	1g
2059.7-K-IP	4-Fluoro-2-methylphenol	126.13	[452-72-2]	1000µg/mL	isopropanol	1	1mL
2059.7-1G	4-Fluoro-2-methylphenol	126.13	[452-72-2]	neat		1	1g
2058.7-K-IP	4-Fluoro-3-methylphenol	126.13	[452-70-0]	1000µg/mL	isopropanol	1	1mL
2058.7-1G	4-Fluoro-3-methylphenol	126.13	[452-70-0]	neat		1	1g

Deuterated phenols

2415.15-K-IP	Bisphenol-A-2,2',6,6'-d4	232.32	[102438-62-0]	1000µg/mL	isopropanol	5	1mL
2416.15-K-IP	Bisphenol-A-3,3',5,5'-d4	232.32	[347841-41-2]	1000µg/mL	isopropanol	5	1mL
2417.15-K-IP	Bisphenol-A-d6	234.33	[86588-58-1]	1000µg/mL	isopropanol	5	1mL
2418.15-K-IP	Bisphenol-A-2,2',3,3',5,5',6,6'-d8	236.34	[92739-58-7]	1000µg/mL	isopropanol	5	1mL
2419.15-K-IP	Bisphenol-A-d16	244.39	[96210-87-6]	1000µg/mL	isopropanol	5	1mL
2427.6-K-IP	4-Bromophenol-2,3,5,6-d4	177.03	[152404-44-9]	1000µg/mL	isopropanol	5	1mL
2407.10-K-IP	4-n-Butylphenol-2,3,5,6-d4, OD	155.25		1000µg/mL	isopropanol	5	1mL
2282.10-K-IP	4-tert-Butyl-d9-phenol-2,3,5,6-d4	163.30	[225386-58-3]	1000µg/mL	isopropanol	5	1mL
2420.6-K-IP	2-Chlorophenol-3,4,5,6-d4	132.58	[93951-73-6]	1000µg/mL	isopropanol	5	1mL
2421.6-K-IP	4-Chlorophenol-2,3,5,6-d4, OD	132.58	[344298-84-6]	1000µg/mL	isopropanol	5	1mL
2511.7-K-IP	4-Chloro-3-methylphenol-2,6-d2	144.60	[93951-72-5]	1000µg/mL	isopropanol	1	1mL
2510.7-K-IP	4-Chloro-2-methylphenol-3,5,6-d3	145.60	[358731-13-2]	1000µg/mL	isopropanol	1	1mL
2393.7-K-IP	o-Cresol-d8	116.19	[203645-65-2]	1000µg/mL	isopropanol	5	1mL
2394.7-K-IP	m-Cresol-d8	116.19	[302911-90-6]	1000µg/mL	isopropanol	5	1mL
2280.7-K-T	p-Cresol-d8	115.18	[190780-66-6]	1000µg/mL	toluene	5	1mL
2428.6	2,4-Dibromophenol-3,5,6-d3	254.92		Please inquire			
2412.15-K-IP	2,6-Di-(tert-butyl-1-d1)-4-methyl-d3-phenol-3,5-d2	227.40		1000µg/mL	isopropanol	5	1mL
2283.15-K-IP	2,6-Di-(tert-butyl-d9)-4-methylphenol-3,5-d2, OD	241.48	[64502-99-4]	1000µg/mL	isopropanol	5	1mL
2413.15-K-IP	2,6-Di-tert-butyl-4-methylphenol-d24	244.50	[358730-95-7]	1000µg/mL	isopropanol	5	1mL
2422.6-K-IP	2,4-Dichlorophenol-3,5,6-d3	166.02	[93951-74-7]	1000µg/mL	isopropanol	5	1mL
2396.8-K-IP	2,4-Dimethylphenol-3,5,6-d3	125.19	[93951-75-8]	1000µg/mL	isopropanol	5	1mL
2397.8-K-IP	2,6-Dimethylphenol-3,5,6-d3, OD	126.19	[285132-85-6]	1000µg/mL	isopropanol	5	1mL
2398.8-K-IP	3,4-Dimethylphenol-2,5,6-d3, OD	126.19	[19031-58-4]	1000µg/mL	isopropanol	5	1mL
2395.8-K-IP	2,4-Dimethylphenol-d10	132.23	[93951-75-8]	1000µg/mL	isopropanol	5	1mL
2433.6-K-IP	2,4-Dinitrophenol-3,5,6-d3	187.13	[93951-77-0]	1000µg/mL	isopropanol	5	1mL
2052.8-K-IO	4-Ethylphenol-2,3,5,6-d4, OD	124.22	[340256-40-8]	1000µg/mL	Isooctane	5	1mL
2281.8-K-IP	4-Ethylphenol-d10	129.25	[352431-18-6]	1000µg/mL	isopropanol	5	1mL
2404.9-K-IP	2-Isopropylphenol-d12	148.27		1000µg/mL	isopropanol	5	1mL
2405.9-K-IP	3-Isopropylphenol-d12	148.27		1000µg/mL	isopropanol	5	1mL
2406.9-K-IP	4-Isopropylphenol-d12	148.27		1000µg/mL	isopropanol	5	1mL
2431.6-K-IP	2-Nitrophenol-3,4,5,6-d4	143.14	[93951-78-1]	1000µg/mL	isopropanol	5	1mL
2432.6-K-IP	4-Nitrophenol-2,3,5,6-d4	143.14	[93951-79-2]	1000µg/mL	isopropanol	5	1mL
2414.15-K-5IP	4-n-Nonylphenol-2,3,5,6-d4, OD	225.39	[358730-95-7]	1000µg/mL	isopropanol	5	5mL
2414.15-K-5AC	4-n-Nonylphenol-2,3,5,6-d4, OD	225.39	[358730-95-7]	1000µg/mL	acetone	5	5mL
2327.14-100-IO	4-n-Octylphenol-d17	223.43		100µg/mL	isooctane	1	1mL
2411.11-K-IP	4-n-Pentylphenol-d6	180.35		1000µg/mL	isopropanol	5	1mL
2390.6-K-IP	Phenol, OD	95.12	[1003-66-3]	1000µg/mL	isopropanol	5	1mL
2391.6-K-IP	Phenol-3,5-d2	96.13	[64045-87-0]	1000µg/mL	isopropanol	5	1mL
2392.6-K-IP	Phenol-2,4,6-d3, OD	98.14	[203645-65-2]	1000µg/mL	isopropanol	5	1mL
2279.6-K-T	Phenol-2,3,4,5,6-d5	99.14	[4165-62-2]	1000µg/mL	toluene	5	1mL
2349.6-K-IP	Phenol-d6	100.15	[13127-88-3]	1000µg/mL	isopropanol	5	1mL
2348.9-K-IP	4-n-Propylphenol-d12	148.27	[352431-21-1]	1000µg/mL	isopropanol	5	1mL
2430.6-K-IP	2,4,6-Tribromophenol-3,5-d2	332.81	[93951-78-1]	1000µg/mL	isopropanol	5	1mL
2424.6-K-IP	2,3,6-Trichlorophenol-4,5-d2	199.46	[93951-81-6]	1000µg/mL	isopropanol	5	1mL
2425.6-K-IP	2,4,5-Trichlorophenol-3,6-d2	199.46	[93951-82-7]	1000µg/mL	isopropanol	5	1mL
2426.6-K-IP	2,4,6-Trichlorophenol-3,5-d2	199.46	[93951-80-5]	1000µg/mL	isopropanol	5	1mL
2401.9-K-IP	2,3,5-Trimethylphenol-d11	147.26	[362049-46-5]	1000µg/mL	isopropanol	5	1mL



2402.9-K-IP	2,3,6-Trimethylphenol-d11	147.26	[347841-83-2]	1000µg/mL	isopropanol	5	1mL
2403.9-K-IP	2,4,6-Trimethylphenol-d11	147.26	[362049-45-4]	1000µg/mL	isopropanol	5	1mL

C0-C1 Phenols

1427.6-K-W	Phenol	94.11	[108-95-2]	1000µg/mL	water	1	1mL
1427.6-1G	Phenol	94.11	[108-95-2]	neat		1	1g
1403.7-1G	o-Cresol	108.14	[95-48-7]	neat		1	1g
1404.7-1G	m-Cresol	108.14	[108-39-4]	neat		1	1g
1358.7-1G	p-Cresol	108.14	[106-44-5]	neat		1	1g
1637.4-KIT	Phenol C0-C1 Kit (neat)						Kit

C2 Phenols

1405.8-1G	2,3-Dimethylphenol	122.17	[526-75-0]	neat		1	1g
1406.8-1G	2,4-Dimethylphenol	122.17	[105-67-9]	neat		1	1g
1407.8-1G	2,5-Dimethylphenol	122.17	[95-87-4]	neat		1	1g
1365.8-1G	2,6-Dimethylphenol	122.17	[576-26-1]	neat		1	1g
1409.8-1G	3,4-Dimethylphenol	122.17	[95-65-8]	neat		1	1g
1360.8-1G	3,5-Dimethylphenol	122.17	[108-68-9]	neat		1	1g
1410.8-1G	2-Ethylphenol	122.17	[90-00-6]	neat		1	1g
1364.8-1G	3-Ethylphenol	122.17	[620-17-7]	neat		1	1g
1411.8-1G	4-Ethylphenol	122.17	[123-07-9]	neat		1	1g
1638.9-KIT	Phenol C2 Kit						Kit

C3 Phenols

1412.9-1G	2,3,5-Trimethylphenol	136.20	[697-82-5]	neat		1	1g
1413.9-1G	2,3,6-Trimethylphenol	136.20	[2416-94-6]	neat		1	1g
1362.9-1G	2,4,6-Trimethylphenol Mesitol	136.20	[527-60-6]	neat		1	1g
1414.9-250MG	3,4,5-Trimethylphenol	136.20	[527-54-8]	neat		1	250mg
1516.9-K-IO	3-Ethyl-5-methylphenol	136.20	[698-71-5]	1000µg/mL	isooctane	1	1mL
1418.9-1G	2-Isopropylphenol	136.20	[88-69-7]	neat		1	1g
1419.9-250MG	3-Isopropylphenol	136.20	[618-45-1]	neat		1	250mg
1420.9-1G	4-Isopropylphenol	136.20	[99-89-8]	neat		1	1g
1415.9-1G	2-n-Propylphenol	136.20	[644-35-9]	neat		1	1g
1416.9-1G	3-n-Propylphenol	136.20	[621-27-2]	neat		1	1g
1417.9-1G	4-n-Propylphenol	136.20	[645-56-7]	neat		1	1g
1639.11-KIT	Phenol C3 Kit						Kit

C4 Phenols

1357.10-1G	4-n-Butylphenol	150.22	[1638-22-8]	neat		1	1g
1421.10-1G	2-sec-Butylphenol	150.22	[89-72-5]	neat		1	1g
1422.10-1G	4-sec-Butylphenol	150.22	[99-71-8]	neat		1	1g
1359.10-1G	2-tert-Butylphenol	150.22	[88-18-6]	neat		1	1g
1361.10-1G	3-tert-Butylphenol	150.22	[585-34-2]	neat		1	1g
1423.10-1G	4-tert-Butylphenol	150.22	[98-54-4]	neat		1	1g
1428.10-1G	2-Isopropyl-5-methylphenol Thymol	150.22	[89-83-8]	neat		1	1g
1424.10-1G	4-Isopropyl-3-methylphenol	150.22	[3228-02-2]	neat		1	1g
1425.10-250MG	5-Isopropyl-2-methylphenol Carvacrol	150.22	[499-75-2]	neat		1	250mg
1426.10-1G	5-Isopropyl-3-methylphenol	150.22	[3228-03-3]	neat		1	1g
1640.10-KIT	Phenol C4 Kit						Kit

C5 Phenols

1363.11-250MG	4-n-Pentylphenol	164.25	[14938-35-3]	neat		1	250mg
1517.11-K-IO	2-(1-Methylbutyl)phenol	164.25	[87-26-3]	1000µg/mL	isooctane	1	1mL
1518.11-K-IO	4-Isopentylphenol	164.25	[1805-61-4]	1000µg/mL	isooctane	1	1mL
1433.11-1G	4-tert-Amylphenol	164.25	[80-46-6]	neat		1	1g
1430.11-1G	2-tert-Butyl-4-methylphenol	164.25	[2409-55-4]	neat		1	1g
1431.11-1G	2-tert-Butyl-5-methylphenol	164.25	[88-60-8]	neat		1	1g

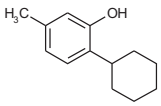
1432.11-1G	2-tert-Butyl-6-methylphenol	164.25	[2219-82-1]	neat		1	1g
1429.11-1G	4-tert-Butyl-2-methylphenol	164.25	[98-27-1]	neat		1	1g
1519.11-K-IO	5-tert-Butyl-2-methylphenol	164.25	[5781-02-2]	1000µg/mL	isooctane	1	1mL
1641.9-KIT	Phenol C5 Kit						Kit

C6 Phenols

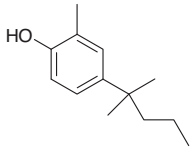
1806.12-1G	2-Phenylphenol	170.21	[90-43-7]	neat		1	1g
1807.12-1G	3-Phenylphenol	170.21	[580-51-8]	neat		1	1g
1808.12-1G	4-Phenylphenol	170.21	[92-69-3]	neat		1	1g
1439.12-1G	2-/4-Cyclohexylphenol	176.26	[26570-85-4]	neat		1	1g
1438.12-1G	4-Cyclohexylphenol	176.26	[1131-60-8]	neat		1	1g
1795.12-K-IO	2,4-Diisopropylphenol	178.28	[2934-05-6]	1000µg/mL	isooctane	1	1mL
1520.12-K-IO	2,5-Diisopropylphenol	178.28	[35946-91-9]	1000µg/mL	isooctane	1	1mL
1434.12-250MG	2,6-Diisopropylphenol	178.28	[2078-54-8]	neat		1	250mg
1436.12-1G	2-tert-Butyl-4,6-dimethylphenol	178.28	[1879-09-0]	neat		1	1g
1435.12-1G	2-tert-Butyl-4-ethylphenol	178.28	[96-70-8]	neat		1	1g
1437.12-1G	4-n-Hexylphenol	178.28	[2446-69-7]	neat		1	1g
1642.11-KIT	Phenol C6 Kit						Kit

C7 Phenols

2388.13-1G	2-Benzylphenol	184.24	[28994-41-4]	neat		1	1g
2389.13-1G	4-Benzylphenol	184.24	[101-53-1]	neat		1	1g
1503.13-250MG	2-Cyclohexyl-5-methylphenol	190.29	[1596-13-0]	neat		1	250mg



2908.13-K-IO	2-Methyl-4-tert-hexylphenol	192.30	[6793-80-2]	1000µg/mL	isooctane	1	1mL



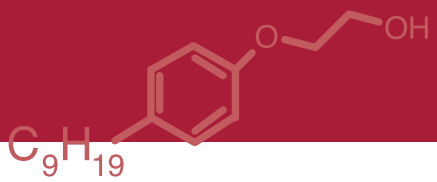
1440.13-1G	4-n-Heptylphenol	192.30	[1987-50-4]	neat		1	1g
1643.5-KIT	Phenol C7 Kit						Kit

C8 Phenols

2439.14-K-IP	2-Benzyl-4-methylphenol	198.27	[716-96-1]	1000µg/mL	isopropanol	1	1mL
1515.14-K-IO	2,4-Di-sec-butylphenol	206.33	[1849-18-9]	1000µg/mL	isooctane	1	1mL
1441.14-1G	2,6-Di-sec-butylphenol	206.33	[5510-99-6]	neat		1	1g
1442.14-1G	2,4-Di-tert-butylphenol	206.33	[96-76-4]	neat		1	1g
1443.14-1G	2,6-Di-tert-butylphenol	206.33	[128-39-2]	neat		1	1g
1444.14-1G	3,5-Di-tert-butylphenol	206.33	[1138-52-9]	neat		1	1g
1445.14-1G	4-n-Octylphenol	206.33	[1806-26-4]	neat		1	1g
1446.14-1G	4-tert-Octylphenol	206.33	[140-66-9]	neat		1	1g
1644.8-KIT	Phenol C8 Kit						Kit

C9 Phenols

1448.15-K-IO	2,6-Di-tert-butyl-4-methylphenol (2,6-Bis(1,1-dimethylethyl)-4-methylphenol)	220.36	[128-37-0]	1000µg/mL	isooctane	1	1mL
1521.15-K-IO	4,6-Di-tert-butyl-2-methylphenol	220.36	[616-55-7]	1000µg/mL	isooctane	1	1mL
1522.15-K-IO	2-Methyl-4-tert-octylphenol	220.36	[2219-84-3]	1000µg/mL	isooctane	1	1mL
1450.15-5K-IO	4-n-Nonylphenol	220.36	[104-40-5]	5000µg/mL	isooctane	1	1mL
2044.15-K-IO	4-Nonylphenol, mixture of isomers	220.36	[84852-15-3]	1000µg/mL	isooctane	1	1mL
1450.15-K-IO	4-n-Nonylphenol	220.36	[104-40-5]	1000µg/mL	isooctane	1	1mL
2365.15-K-IO	4-Nonylphenol, mixture of isomers, Type B	220.36	[84852-15-3]	1000µg/mL	isooctane	1	1mL
1645.6-KIT	Phenol C9 Kit						Kit



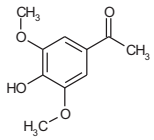
C10+ Phenols

1687.16-1G	4-tert-Butyl-2-phenylphenol	226.32	[577-92-4]	neat		1	1g
1455.16-250MG	2,4-Bis(1-methylbutyl)phenol	234.39	[96-94-6]	neat		1	250mg
1523.16-K-IO	2,4-Dimethyl-6-isooctylphenol	234.39	[198220-45-0]	1000µg/mL	isooctane	1	1mL
1453.16-1G	2,4-Di-tert-pentylphenol	234.39	[120-95-6]	neat		1	1g
1452.16-1G	2,6-Di-tert-butyl-4-ethylphenol	234.39	[4130-42-1]	neat		1	1g
1454.16-100MG	4-tert-Butyl-2,6-diisopropylphenol	234.39	[57354-65-1]	neat		1	100mg
2436.18-K-IO	2-n-Dodecylphenol	262.44	[5284-29-7]	1000µg/mL	isooctane	1	1mL
2437.19-K-IO	2-n-Dodecyl-p-cresol	276.47	[25912-91-8]	1000µg/mL	isooctane	1	1mL
2438.19-K-IO	4-n-Dodecyl-o-cresol	276.47	[29665-59-6]	1000µg/mL	isooctane	1	1mL
1646.9-KIT	Phenol C10 Kit						Kit

Other phenols

2307.10 **Acetosyringone**

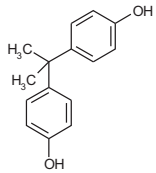
[2478-38-8] MW 196.20



2307.10-K-IO 1000µg/mL isooctane, 1x1mL

1220.15 **Bisphenol A**

[80-05-7] MW 228.29



1220.15-K-IO 1000µg/mL isooctane, 1x1mL

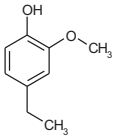
2369.6 **Catechol**

[120-80-9] MW 110.11

2369.6-K-IO 1000µg/mL isooctane, 1x1mL

2374.9 **4-Ethylguaiacol**

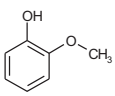
[2785-89-9] MW 152.19



2374.9-K-IO 1000µg/mL isooctane, 1x1mL

2372.7 **Guaiacol**

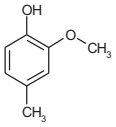
[90-05-1] MW 124.14



2372.7-K-IO 1000µg/mL isooctane, 1x1mL

2373.8 **4-Methylguaiacol**

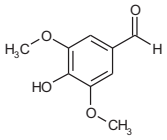
[93-51-6] MW 138.17



2373.8-K-IO 1000µg/mL isooctane, 1x1mL

2371.9 **Syringaldehyde**

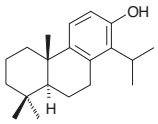
[134-96-3] MW 182.18



2371.9-K-IO 1000µg/mL isooctane, 1x1mL

2108.20 **Totarol**

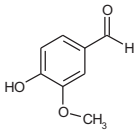
[511-15-9] MW 286.46



2108.20-K-IO 1000µg/mL isooctane, 1x1mL

2370.8 **Vanillin**

[121-33-5] MW 152.15

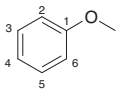


2370.8-K-IO 1000µg/mL isooctane, 1x1mL

2375.9 **Other Phenols kit**

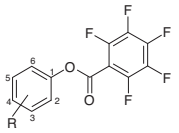
2375.9-KIT Kit

Anisols



2474.7-K-IP	2,6-Dibromoanisole	265.93	[38603-09-7]	1000µg/mL	isopropanol	1	1mL
2456.7-K-IP	2,4-Dichloro-6-nitroanisole	222.03	[37138-82-2]	1000µg/mL	isopropanol	1	1mL
2455.7-K-IP	2,6-Dichloro-4-nitroanisole	222.03	[17742-69-7]	1000µg/mL	isopropanol	1	1mL
2457.9-K-IP	2,6-Dimethyl-4-anisole	181.19	[14804-39-8]	1000µg/mL	isopropanol	1	1mL
2451.7-K-IP	2,4-Dinitroanisole	198.14	[119-27-7]	1000µg/mL	isopropanol	1	1mL
2452.7-K-IP	2,5-Dinitroanisole	198.14	[3962-77-4]	1000µg/mL	isopropanol	1	1mL
2453.7-K-IP	2,6-Dinitroanisole	198.14	[3535-67-9]	1000µg/mL	isopropanol	1	1mL
2454.8-K-IP	2,4-Dinitro-6-methylanisole	212.16	[29027-13-2]	1000µg/mL	isopropanol	1	1mL
2449.8-K-IP	3-Methyl-2-nitroanisole	167.17	[5345-42-6]	1000µg/mL	isopropanol	1	1mL
2447.8-K-IP	3-Methyl-4-nitroanisole	167.17	[5367-32-8]	1000µg/mL	isopropanol	1	1mL
2448.8-K-IP	4-Methyl-2-nitroanisole	167.17	[119-10-8]	1000µg/mL	isopropanol	1	1mL
2450.8-K-IP	5-Methyl-2-nitroanisole	167.17	[38512-82-2]	1000µg/mL	isopropanol	1	1mL
2442.7-K-IP	2-Nitroanisole	153.14	[91-23-6]	1000µg/mL	isopropanol	1	1mL
2443.7-K-IP	3-Nitroanisole	153.14	[555-03-3]	1000µg/mL	isopropanol	1	1mL
2444.7-K-IP	4-Nitroanisole	153.14	[100-17-4]	1000µg/mL	isopropanol	1	1mL
2475.7-K-IP	2,4,6-Tribromoanisole	344.83	[607-99-8]	1000µg/mL	isopropanol	1	1mL
2476.7-K-IP	2,3,6-Trichloroanisole	211.48	[50375-10-5]	1000µg/mL	isopropanol	1	1mL
3121.17-KIT	Anisol Kit						Kit

Phenol PFB (perfluorobenzoyl) derivatives



2092.13-K-IP	2,4-Dibromophenol-PFB	445.97		1000µg/mL	isopropanol	1	1mL
2092.13-K-IP	2,4-Dibromophenol-PFB	445.97		1000µg/mL	isopropanol	5	1mL
2092.13-K-5IP	2,4-Dibromophenol-PFB	445.97		1000µg/mL	isopropanol	1	5mL
2469.13-K-IP	2,5-Dibromophenol-PFB	445.97		1000µg/mL	isopropanol	1	1mL
2093.15-K-IP	4-Ethylphenol-d4-PFB	320.25	[100-58-8]	1000µg/mL	isopropanol	1	1mL
2502.15-K-IP	4-Ethylphenol-d9-PFB	325.28		1000µg/mL	isopropanol	1	1mL
2088.13-K-IP	2-Fluorophenol-PFB	306.17		1000µg/mL	isopropanol	1	1mL
2090.14-K-IP	4-Fluoro-2-methylphenol-PFB	320.19		1000µg/mL	isopropanol	1	1mL
2089.14-K-IP	4-Fluoro-3-methylphenol-PFB	320.19		1000µg/mL	isopropanol	1	1mL
2091.13-K-IP	2,4,6-Tribromophenol-PFB	524.86		1000µg/mL	isopropanol	1	1mL
2091.13-K-5IP	2,4,6-Tribromophenol-PFB	524.86		1000µg/mL	isopropanol	1	5mL
3122.8-KIT	Phenol PFB derivative Kit						Kit

Nitrophenols

2747.6-K-IP	2-Amino-5-nitrophenol		154.13	[121-88-0]	1000µg/mL	isopropanol	1	1mL
2144.10-K-IO	2-sec-Butyl-4,6-dinitrophenol	Dinoseb	240.22	[88-85-7]	1000µg/mL	isooctane	1	1mL
2483.10-100	2-tert-Butyl-4,6-dinitrophenol	Dinoterb	240.22	[1420-07-1]	100µg/mL	c.hexane or ac.nitrile	1	1mL
2133.12-K-IP	2-Cyclohexyl-4,6-dinitrophenol		266.26	[131-89-5]	1000µg/mL	isopropanol	1	1mL
2466.6-K-IP	2,4-Dichloro-6-nitrophenol		208.00	[609-89-2]	1000µg/mL	isopropanol	1	1mL
2467.6-K-IP	2,6-Dichloro-4-nitrophenol		208.00	[618-80-4]	1000µg/mL	isopropanol	1	1mL
2465.8-K-IP	2,6-Dimethyl-4-nitrophenol		167.17	[2423-71-4]	1000µg/mL	isopropanol	1	1mL
2083.7-K-IP	4,6-Dinitro-2-methylphenol (2-Methyl-4,6-dinitrophenol) 4,6-Dinitro-o-cresol		198.14	[534-52-1]	1000µg/mL	isopropanol	1	1mL
2079.6-K-T	2,4-Dinitrophenol		184.11	[51-28-5]	1000µg/mL	toluene	1	1mL
2462.6-K-IP	2,5-Dinitrophenol		184.11	[329-71-5]	1000µg/mL	isopropanol	1	1mL
2463.6-K-IP	2,6-Dinitrophenol		184.11	[573-56-8]	1000µg/mL	isopropanol	1	1mL
2481.9-K-IP	2-Ethoxymethyl-4,6-dinitrophenol	Etinofen	242.19	[2544-94-7]	1000µg/mL	isopropanol	1	1mL
2461.7-K-IP	3-Methyl-2-nitrophenol		153.14	[4920-77-8]	1000µg/mL	isopropanol	1	1mL
2459.7-K-IP	3-Methyl-4-nitrophenol		153.14	[2581-34-2]	1000µg/mL	isopropanol	1	1mL
2458.7-K-IP	4-Methyl-2-nitrophenol		153.14	[119-33-5]	1000µg/mL	isopropanol	1	1mL
2460.7-K-IP	5-Methyl-2-nitrophenol		153.14	[700-38-9]	1000µg/mL	isopropanol	1	1mL
2085.6-K-T	2-Nitrophenol		139.11	[88-75-5]	1000µg/mL	toluene	1	1mL
2086.6-K-T	3-Nitrophenol		139.11	[554-84-7]	1000µg/mL	toluene	1	1mL
2087.6-K-ME	4-Nitrophenol		139.11	[100-02-7]	1000µg/mL	methanol	1	1mL
2385.19-KIT	Nitrophenol Kit							Kit

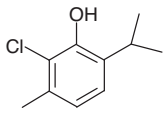
Aminophenols

2519.6-K-ME	4-Aminophenol	109.13	[123-30-8]	1000µg/mL	methanol	1	1mL
2519.6-500MG	4-Aminophenol	109.13	[123-30-8]	neat		1	500mg

Chlorophenols

Monochlorophenols

2062.6-K-IP	2-Chlorophenol	128.56	[95-57-8]	1000µg/mL	isopropanol	1	1mL
2067.6-K-IP	3-Chlorophenol	128.56	[108-43-0]	1000µg/mL	isopropanol	1	1mL
2068.6-K-IP	4-Chlorophenol	128.56	[106-48-9]	1000µg/mL	isopropanol	1	1mL
2063.7-K-IP	2-Chloro-5-methylphenol	142.59	[615-74-7]	1000µg/mL	isopropanol	1	1mL
2070.7-K-IP	4-Chloro-2-methylphenol	142.59	[1570-64-5]	1000µg/mL	isopropanol	1	1mL
2071.7-K-IP	4-Chloro-3-methylphenol	142.59	[59-50-7]	1000µg/mL	isopropanol	1	1mL
2440.10-K-IP	2-Chloro-4-tert-butylphenol	184.67	[98-28-2]	1000µg/mL	isopropanol	1	1mL
2378.10-K-IP	6-Chloro-5-methyl-2-(1-methylethyl)phenol	184.67	[89-68-9]	1000µg/mL	isopropanol	1	1mL



2500.11-K-IP	2-Cyclopentyl-4-chlorophenol	196.68	[13347-42-7]	1000µg/mL	isopropanol	1	1mL
2441.13-K-IP	4-Chloro-2-benzylphenol	218.69	[120-32-1]	1000µg/mL	isopropanol	1	1mL
2446.10-KIT	Monochlorophenol Kit						Kit

Dichlorophenols

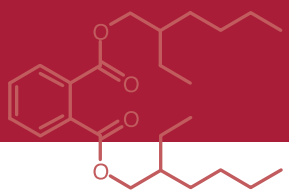
2066.6-K-IP	2,3-Dichlorophenol	163.00	[576-24-9]	1000µg/mL	isopropanol	1	1mL
2064.6-K-IP	2,4-Dichlorophenol	163.00	[120-83-2]	1000µg/mL	isopropanol	1	1mL
2065.6-K-IP	2,5-Dichlorophenol	163.00	[583-78-8]	1000µg/mL	isopropanol	1	1mL
2069.6-K-IP	2,6-Dichlorophenol	163.00	[87-65-0]	1000µg/mL	isopropanol	1	1mL
2080.6-K-IP	3,4-Dichlorophenol	163.00	[95-77-2]	1000µg/mL	isopropanol	1	1mL
2078.6-K-IP	3,5-Dichlorophenol	163.00	[591-35-5]	1000µg/mL	isopropanol	1	1mL
2742.7-K-IP	2,4-Dichloro-6-methylphenol	177.03	[1570-65-6]	1000µg/mL	isopropanol	1	1mL
2379.8-K-IP	2,4-Dichloro-3,5-dimethylphenol	191.06	[133-53-9]	1000µg/mL	isopropanol	1	1mL
2738.10-K-IP	2,5-Dichloro-4-tert-butylphenol	219.11	[52780-22-0]	1000µg/mL	isopropanol	1	1mL
2380.9-KIT	Dichlorophenol Kit						Kit

Trichlorophenols

2077.6-K-IP	2,3,4-Trichlorophenol	197.45	[15950-66-0]	1000µg/mL	isopropanol	1	1mL
2073.6-K-IP	2,3,5-Trichlorophenol	197.45	[933-78-8]	1000µg/mL	isopropanol	1	1mL
2072.6-K-IP	2,3,6-Trichlorophenol	197.45	[933-75-5]	1000µg/mL	isopropanol	1	1mL
2075.6-K-IP	2,4,5-Trichlorophenol	197.45	[95-95-4]	1000µg/mL	isopropanol	1	1mL
2076.6-K-IP	2,4,6-Trichlorophenol	197.45	[88-06-2]	1000µg/mL	isopropanol	1	1mL
2082.6-K-IP	3,4,5-Trichlorophenol	197.45	[609-19-8]	1000µg/mL	isopropanol	1	1mL
2381.6-KIT	Trichlorophenol Kit						Kit

Tetra-/ Pentachlorophenols

2081.6-K-IP	2,3,4,5-Tetrachlorophenol	231.89	[4901-51-3]	1000µg/mL	isopropanol	1	1mL
2149.6-K-IO	2,3,4,6-Tetrachlorophenol	231.89	[58-90-2]	1000µg/mL	isooctane	1	1mL
2074.6-K-IP	2,3,5,6-Tetrachlorophenol	231.89	[935-95-5]	1000µg/mL	isopropanol	1	1mL
2084.6-K-IO	Pentachlorophenol	266.34	[87-86-5]	1000µg/mL	isooctane	1	1mL
2084.6-K-IP	Pentachlorophenol	266.34	[87-86-5]	1000µg/mL	isopropanol	1	1mL
2386.4-KIT	Tetra/, Pentachlorophenol Kit						Kit



Bromophenols

3822.6-K-IP	2-Bromophenol	173.01	[95-56-7]	1000µg/mL	isopropanol	1	1mL
2383.6-K-IP	4-Bromophenol	173.01	[106-41-2]	1000µg/mL	isopropanol	1	1mL
3721.6-K-IP	2,3-Dibromophenol	251.91	[57383-80-9]	1000µg/mL	isopropanol	1	1mL
2061.6-K-IP	2,4-Dibromophenol	251.91	[615-58-7]	1000µg/mL	isopropanol	1	1mL
2470.6-K-IP	2,5-Dibromophenol	251.91	[28165-52-8]	1000µg/mL	isopropanol	1	1mL
2472.6-K-IP	2,6-Dibromophenol	251.91	[608-33-3]	1000µg/mL	isopropanol	1	1mL
2507.6-K-IP	2,3,4-Tribromophenol	330.80	[138507-65-0]	1000µg/mL	isopropanol	1	1mL
2471.6-K-IP	2,3,6-Tribromophenol	330.80	[28165-57-3]	1000µg/mL	isopropanol	1	1mL
2508.6-K-IP	2,4,5-Tribromophenol	330.80	[14401-61-7]	1000µg/mL	isopropanol	1	1mL
2060.6-K-IP	2,4,6-Tribromophenol	330.80	[118-79-6]	1000µg/mL	isopropanol	1	1mL
2060.6-5K-5IP	2,4,6-Tribromophenol	330.80	[118-79-6]	5000µg/mL	isopropanol	1	5mL
2509.6-K-IP	2,3,4,6-Tetrabromophenol	409.70	[14400-94-3]	1000µg/mL	isopropanol	1	1mL
2672.6-50-IO	Pentabromophenol	488.59	[608-71-9]	50µg/mL	isooctane	1	1mL
2384.13-KIT	Bromophenol Kit						Kit

Bromoanisols

3823.7-K-IP	3-Bromoanisol	265.93	[2398-37-0]	1000µg/mL	isopropanol	1	1mL
2473.7-K-IP	2,4-Dibromoanisole	265.93	[21702-84-1]	1000µg/mL	isopropanol	1	1mL
2474.7-K-IP	2,6-Dibromoanisole	265.93	[38603-09-7]	1000µg/mL	isopropanol	1	1mL
2475.7-K-IP	2,4,6-Tribromoanisole	344.83	[607-99-8]	1000µg/mL	isopropanol	1	1mL
8105.4-KIT	Bromoanisol Kit						Kit

Phthalates and adipates

Deuterated phthalates

NEW

2478.10-100-IO	Dimethyl phthalate-3,4,5,6-d4	198.21	[93951-89-4]	100µg/mL	isooctane	1	1mL
2478.10-100-IO	Dimethyl phthalate-3,4,5,6-d4	198.21	[93951-89-4]	100µg/mL	isooctane	5	1mL
2892.12-K-IO	Diethyl phthalate-3,4,5,6-d4	226.27	[93952-12-6]	1000µg/mL	isooctane	1	1mL
3123.16-100-IO	Di-iso-butyl phthalate-3,4,5,6-d4	282.37	[358730-88-8]	100µg/mL	isooctane	5	1mL
2479.16-100-IO	Di-n-butyl phthalate-3,4,5,6-d4	282.38	[93952-11-5]	100µg/mL	isooctane	1	1mL
2479.16-100-IO	Di-n-butyl phthalate-3,4,5,6-d4	282.38	[93952-11-5]	100µg/mL	isooctane	5	1mL
2893.18-100-IO	Di-n-pentyl phthalate-3,4,5,6-d4	310.43	[358730-89-9]	100µg/mL	isooctane	1	1mL
2893.18-K-IO	Di-n-pentyl phthalate-3,4,5,6-d4	310.43	[358730-89-9]	1000µg/mL	isooctane	1	1mL
3125.18-100-IO	Benzyl-n-butyl phthalate-3,4,5,6-d4	316.39	[93951-88-3]	100µg/mL	isooctane	5	1mL
2361.24-100-IO	Di-n-octyl phthalate-3,4,5,6-d4	394.59	[93952-13-7]	100µg/mL	isooctane	5	1mL
2894.24-K-IO	Bis(2-ethylhexyl) phthalate-3,4,5,6-d4	394.59	[93951-87-2]	1000µg/mL	isooctane	1	1mL

Phthalates

NEW

Monoalkylphthalates (metabolites)

3805. 9-K-IO	Monomethyl phthalate	180.16	[4376-18-5]	1000µg/mL	isooctane	1	1mL
3806.10-K-IO	Monoethyl phthalate	194.00	[2306-33-4]	Please inquire			
3807. 12-K-IO	Monobutyl phthalate	222.24	[131-70-4]	1000µg/mL	isooctane	1	1mL
3808.15-K-IO	Monobenzylphthalate	256.26	[2528-16-7]	1000µg/mL	isooctane	1	1mL
3590.15-K-IO	Mono-n-hexyl phthalate		[24539-57-9]	1000µg/mL	isooctane	1	1mL
3809. 16-K-IO	Mono(2-ethylhexyl) phthalate	278.35	[4376-20-9]	1000µg/mL	isooctane	1	1mL
3962.4-KIT	Monoalkyl phthalate Kit						Kit

Dialkyl phthalates

2094.10-10MG	Dimethyl phthalate	194.19	[131-11-3]	neat		1	10mg
2094.10-100MG	Dimethyl phthalate	194.19	[131-11-3]	neat		1	100mg
1225.12-10MG	Diethyl phthalate	222.24	[84-66-2]	neat		1	10mg
2102.16-100-NO	Di-iso-butyl phthalate	278.35	[84-69-5]	100mg/mL	nonane	1	1mL
2102.16-10MG	Di-iso-butyl phthalate	278.35	[84-69-5]	neat		1	10mg

2102.16-100MG	Di-iso-butyl phthalate	278.35	[84-69-5]	neat		1	100mg
1226.16-10MG	Di-n-butyl phthalate	278.35	[84-74-2]	neat		1	10mg
1226.16-100MG	Di-n-butyl phthalate	278.35	[84-74-2]	neat		1	100mg
2097.14-10MG	Di(2-methoxyethyl) phthalate	282.30	[34006-76-3]	neat		1	10mg
2097.14-100MG	Di(2-methoxyethyl) phthalate	282.30	[34006-76-3]	neat		1	100mg
2099.18-10MG	Diamyl phthalate Di-n-pentylphthalate	306.41	[131-18-1]	neat		1	10mg
2099.18-100MG	Diamyl phthalate Di-n-pentylphthalate	306.41	[131-18-1]	neat		1	100mg
2096.16-10MG	Di(2-ethoxyethyl) phthalate	310.35	[605-54-9]	neat		1	10mg
2096.16-100MG	Di(2-ethoxyethyl) phthalate	310.35	[605-54-9]	neat		1	100mg
1227.19-10MG	Butylbenzyl phthalate	312.37	[85-68-7]	neat		1	10mg
2055.20-100-HX	Diphenyl isophthalate	318.33	[744-45-6]	100µg/mL	hexane	1	1mL
2056.20-100-HX	Diphenyl phthalate	318.33	[84-62-8]	100µg/mL	hexane	1	1mL
2100.20-10MG	Dicyclohexyl phthalate	330.43	[84-61-7]	neat		1	10mg
2100.20-100MG	Dicyclohexyl phthalate	330.43	[84-61-7]	neat		1	100mg
2098.20-10MG	Di(4-methyl-2-pentyl) phthalate	334.46	[259139-51-0]	neat		1	10mg
2098.20-100MG	Di(4-methyl-2-pentyl) phthalate	334.46	[259139-51-0]	neat		1	100mg
2101.20-10MG	Di-n-hexyl phthalate	334.46	[84-75-3]	neat		1	10mg
2101.20-100MG	Di-n-hexyl phthalate	334.46	[84-75-3]	neat		1	100mg
2054.22-100-HX	Dibenzyl phthalate	346.39	[523-31-9]	100µg/mL	hexane	1	1mL
2103.22-10MG	Hexyl 2-ethylhexyl phthalate	362.51	[75673-16-4]	neat		1	10mg
2103.22-100MG	Hexyl 2-ethylhexyl phthalate	362.51	[75673-16-4]	neat		1	100mg
2095.20-10MG	Di(2-n-butoxyethyl) phthalate	366.46	[117-83-9]	neat		1	10mg
2095.20-100MG	Di(2-n-butoxyethyl) phthalate	366.46	[117-83-9]	neat		1	100mg
1224.24-10MG	Di(2-ethylhexyl)phthalate	390.57	[117-81-7]	neat		1	10mg
1224.24-100MG	Di(2-ethylhexyl)phthalate	390.57	[117-81-7]	neat		1	100mg
8016.24-10MG	Di(2-ethylhexyl)isophthalate	390.57	[137-89-3]	neat		1	10mg
8016.24-100MG	Di(2-ethylhexyl)isophthalate	390.57	[137-89-3]	neat		1	100mg
1223.24-10MG	Di-n-octyl phthalate	390.57	[117-84-0]	neat		1	10mg
1223.24-100MG	Di-n-octyl phthalate	390.56	[117-84-0]	neat		1	100mg
1229.26-10MG	Di-iso-nonyl phthalate (isomer mixture)	418.62	[28553-12-0]	neat		1	10mg
1229.26-100MG	Di-iso-nonyl phthalate (isomer mixture)	418.62	[28553-12-0]	neat		1	100mg
2110.26-10MG	Di-n-nonyl phthalate	418.62	[84-76-4]	neat		1	10mg
2110.26-100MG	Di-n-nonyl phthalate	418.62	[84-76-4]	neat		1	100mg
3049.28-10MG	Di-iso-decyl phthalate	446.67	[26761-40-0]	neat		1	10mg
3126.27-KIT	Mono+Dialkylphthalate Kit						Kit

All dialkylphthalates are also available as 1000µg/mL in isooctane

Deuterated adipates

2276.22-K-IO	Di(2-ethylhexyl) adipate-d8	412.83		1000µg/mL	isooctane	1	1mL

Adipates

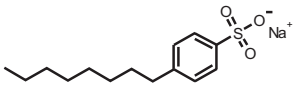
1228.22-10MG	Di(2-ethylhexyl) adipate	370.58	[103-23-1]	neat		1	10mg
2212.22-K-IO	Di-n-octyl adipate	370.58	[123-79-5]	1000µg/mL	isooctane	1	1mL
2213.22-K-IO	Di-iso-octyl adipate	370.58	[1330-86-5]	1000µg/mL	isooctane	1	1mL
2214.24-K-IO	Di-n-nonyl adipate	398.63	[151-32-6]	1000µg/mL	isooctane	1	1mL
2218.24-K-IO	Di-iso-nonyl adipate	398.63	[33703-08-1]	1000µg/mL	isooctane	1	1mL
3127.5-KIT	Adipate Kit						Kit
1919.32-KIT	Phthalate and adipate Kit (3126.27+3127.5)						Kit

LAS and ABS (Linear alkylbenzene sulfonates and alkylbenzene sulfonates)

NEW

Pure isomers

2909.14-100-ME	Sodium p-n-octylbenzenesulfonate	292.37	[6149-03-7]	100µg/mL	methanol	1	1mL



2910.16-100-ME	Sodium p-n-decylbenzenesulfonate		[2627-06-7]	100µg/mL	methanol	1	1mL
2911.17-100-ME	Sodium p-n-undecylbenzenesulfonate		[20466-34-6]	100µg/mL	methanol	1	1mL
2560.18-100-ME	Calcium p-n-dodecylbenzenesulfonate	365.57	[26264-06-2]	100µg/mL	methanol	1	1mL
2561.18-100-ME	Sodium p-n-dodecylbenzenesulfonate	348.48	[2211-98-5]	100µg/mL	methanol	1	1mL
2561.18-K-ME	Sodium p-n-dodecylbenzenesulfonate	348.48	[2211-98-5]	1000µg/mL	methanol	1	1mL
2562.19-K-ME	Sodium p-n-tridecylbenzenesulfonate	362.51	[14356-40-2]	1000µg/mL	methanol	1	1mL
2562.19-100-ME	Sodium p-n-tridecylbenzenesulfonate	362.51	[14356-40-2]	100µg/mL	methanol	1	1mL
2912.20-100-ME	Sodium p-n-tetradecylbenzenesulfonate		[1797-33-7]	100µg/mL	methanol	1	1mL
2913.7-KIT	LAS Kit (methanol)						Kit

Technical mixtures

3722.18-K-ME	Dodecylbenzenesulfonic acid, mixture of C12 LAS 12, soft		[27176-87-0]	1000µg/mL	methanol	1	1mL
3722.18-100MG	Dodecylbenzenesulfonic acid, mixture of C12 LAS 12, soft		[27176-87-0]	neat		1	100mg
3723.18-K-ME	Sodium dodecylbenzenesulfonate, mixture of C10-C14 ABS 10-14 Na, Hard	348.18	[25155-30-0]	1000µg/mL	methanol	1	1mL
3723.18-100MG	Sodium dodecylbenzenesulfonate, mixture of C10-C14 ABS 10-14 Na, Hard	348.18	[25155-30-0]	neat		1	100mg
3724.18-K-ME	Sodium dodecylbenzenesulfonate, mixture of C10-C14 LAS 10-14, Soft		[69669-44-9]	1000µg/mL	methanol	1	1mL
3724.18-100MG	Sodium dodecylbenzenesulfonate, mixture of C10-C14 LAS 10-14, Soft		[69669-44-9]	neat		1	100mg
8106.18-100MG	Sodium dodecylbenzenesulfonate, mixture of C10-C14, 38% water LAS 10-14, Soft		[69669-44-9]	neat		1	100mg
3725.18-K-ME	Dodecene-1 LAS	348.47	[25155-30-0]	1000µg/mL	methanol	1	1mL

Metallo-organics

Tin-organics

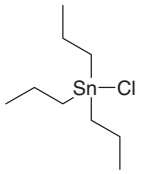
Tin chlorides (common pollutants)

1983.4-K-5IO	Mono-n-butyltin trichloride	282.17	[1118-46-3]	1000µg/mL	isooctane	1	5mL
1983.4-1G	Mono-n-butyltin trichloride	282.17	[1118-46-3]	neat		1	1g
1982.8-K-5IO	Di-n-butyltin dichloride	303.83	[683-18-1]	1000µg/mL	isooctane	1	5mL
1982.8-1G	Di-n-butyltin dichloride	303.83	[683-18-1]	neat		1	1g
1981.12-K-5IO	Tri-n-butyltin chloride	325.49	[1461-22-9]	1000µg/mL	isooctane	1	5mL
1981.12-1G	Tri-n-butyltin chloride	325.49	[1461-22-9]	neat		1	1g
2487.8-K-ME	Mono-n-octyltin trichloride	338.27	[3091-25-6]	1000µg/mL	methanol	1	1mL
2487.8-1G	Mono-n-octyltin trichloride	338.27	[3091-25-6]	neat		1	1g
2488.16-K-ME	Di-n-octyltin dichloride	416.05	[3542-36-7]	1000µg/mL	methanol	1	1mL
2488.16-1G	Di-n-octyltin dichloride	416.05	[3542-36-7]	neat		1	1g
2695.24-K-5IO	Tri-n-octyltin chloride	493.82	[2587-76-0]	1000µg/mL	isooctane	1	5mL
2695.24-100MG	Tri-n-octyltin chloride	493.82	[2587-76-0]	neat		1	100mg
1987.6-K-5IO	Monophenyltin trichloride	302.16	[1124-19-2]	1000µg/mL	isooctane	1	5mL
1987.6-1G	Monophenyltin trichloride	302.16	[1124-19-2]	neat		1	1g
1986.12-K-5IO	Diphenyltin dichloride	343.81	[1135-99-5]	1000µg/mL	isooctane	1	5mL
1986.12-1G	Diphenyltin dichloride	343.81	[1135-99-5]	neat		1	1g
1985.18-K-5IO	Triphenyltin chloride	385.46	[639-58-7]	1000µg/mL	isooctane	1	5mL
1985.18-1G	Triphenyltin chloride	385.46	[639-58-7]	neat		1	1g
2489.18-K-ME	Tricyclohexyltin chloride	403.61	[3091-32-5]	1000µg/mL	methanol	1	1mL
2489.18-1G	Tricyclohexyltin chloride	403.61	[3091-32-5]			1	1g
1984.3-KIT	Butyltin chlorides Kit (solutions, 1983.4, 1982.8, 1981.12)						Kit
1984.3-KIT	Butyltin chlorides Kit (neat, 1983.4, 1982.8, 1981.12)						Kit
1988.3-KIT	Phenyltin chlorides Kit (solutions, 1987.6, 1986.12, 1985.18)						Kit
1988.3-KIT	Phenyltin chlorides Kit (neat, 1987.6, 1986.12, 1985.18)						Kit
3726.10-KIT	Tin Chlorides Kit (neat)						Kit

Internal standards (tin chlorides)

1989.9 **Tri-n-propyltin chloride**

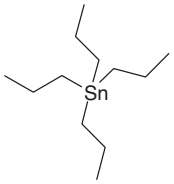
[2279-76-7] MW 283.41



1989.9-K-ME	1000µg/mL methanol, 1x1mL
1989.9-1G	neat, 1x1g

2490.12 **Tetra-n-propyltin**

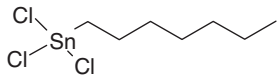
[2176-98-9] MW 291.05



2490.12-K-IO	1000µg/mL isooctane, 1x1mL
2490.12-1G	neat, 1x1g

2495.7 **Mono-n-heptyltin trichloride**

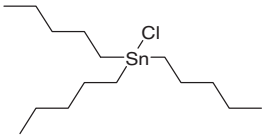
[59344-47-7] MW 324.25



2495.7-K-ME	1000µg/mL methanol, 1x1mL
2495.7-100MG	neat, 1x100mg

2050.15 **Tri-n-pentyltin chloride**

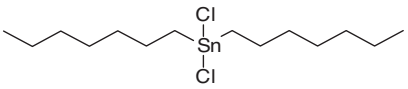
[3342-67-4] MW 367.57



2050.15-K-ME	1000µg/mL methanol, 1x1mL
2050.15-1G	neat, 1x1g

2496.14 **Di-n-heptyltin dichloride**

[74340-12-8] MW 387.99



2496.14-K-ME	1000µg/mL methanol, 1x1mL
2496.14-100MG	neat, 1x100mg

2496.14 **Tetra-n-pentyltin**

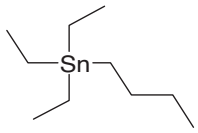
[3765-65-9] MW 403.27

2496.14-K-ME	1000µg/mL methanol, 1x1mL
2496.14-1G	neat, 1x1g

Analytes ethyl derivatives

2119.10 **Mono-n-butyltriethyltin**

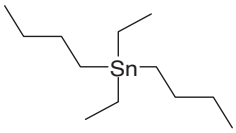
[17582-53-5] MW 262.99



2119.10-K-IO 1000µg/mL isooctane, 1x1mL

2120.12 **Di-n-butyldiethyltin**

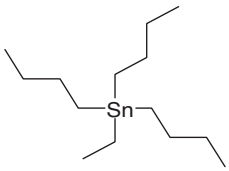
[20525-62-6] MW 291.05



2120.12-K-IO 1000µg/mL isooctane, 1x1mL

1886.14 **Ethyltri-n-butyltin**

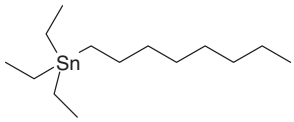
[19411-60-0] MW 319.10



1886.14-K-IO 1000µg/mL isooctane, 1x1mL

2492.14 **Mono-n-octyltriethyltin**

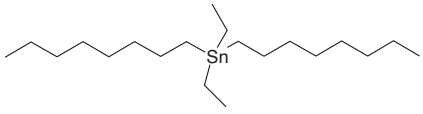
[16216-27-6] MW 319.10



2492.14-K-IO 1000µg/mL isooctane, 1x1mL

2491.20 **Di-n-octyldiethyltin**

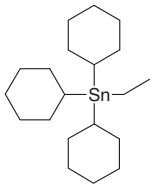
[14775-13-4] MW 403.26



2491.20-K-IO 1000µg/mL isooctane, 1x1mL

2498.20 **Ethyltricyclohexyltin**

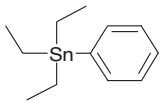
[106376-80-1] MW 397.22



2498.20-K-IO 1000µg/mL isooctane, 1x1mL

2118.12 **Monophenyltriethyltin**

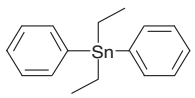
[878-51-3] MW 282.98



2118.12-K-IO 1000µg/mL isooctane, 1x1mL

2117.16 **Diphenyldiethyltin**

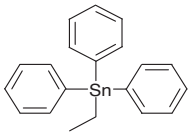
[10203-52-8] MW 331.03



2117.16-K-IO 1000µg/mL isooctane, 1x1mL

1887.20 **Ethyltriphenyltin**

[5424-25-9] MW 379.07

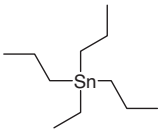


1887.20-K-IO 1000µg/mL isooctane, 1x1mL

Internal standards ethyl derivatives

1955.11 **Ethyltri-n-propyltin**

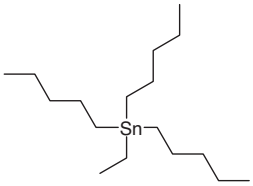
[3440-79-7] MW 277.02



1955.11-K-IO 1000µg/mL Isooctane, 1x1mL

2049.17 **Ethyltripentyltin**

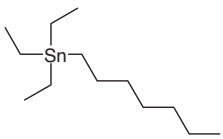
[198958-44-0] MW 361.18



2049.17-K-IO 1000µg/mL isooctane, 1x1mL

2494.13 **Mono-n-heptyltriethyltin**

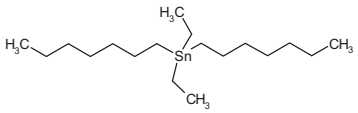
[51283-39-7] MW 305.07



2494.13-K-IO 1000µg/mL isooctane, 1x1mL

2493.18 **Di-n-heptyldiethyltin**

[165900-80-1] MW 375.21



2493.18-K-IO 1000µg/mL isooctane, 1X1mL

2023.13 **Ethylalkyl-/ Ethylaryltin Kit**

2023.13-KIT Kit

Derivatizing agents and other

1944.8-1G	Sodium tetraethylborate	150.05	[15523-24-7]	neat		1	1g
2497.16-K-IO	Tetra-n-butyltin	347.16	[1461-25-2]	1000µg/mL	isooctane	1	1mL
2024.20-KIT-S	Organotin Analysis Kit (one of each of the above, solution when available)						Kit
2024.20-KIT-N	Organotin Analysis Kit (one of each of the above, neat when available)						Kit

Organoleads

2201.8-K-IO	Tetraethyllead (contains trace of xylenes)	323.44	[78-00-2]	1000µg/mL	isooctane	1	1mL
2201.8-K-10IO	Tetraethyllead (contains trace of xylenes)	323.44	[78-00-2]	1000µg/mL	isooctane	1	10mL

Oil-based metal standards

Please inquire

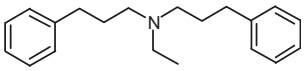
Forensics and pharmaceuticals

Forensics and drug/pharma metabolites

NEW

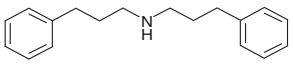
Alverine

3756.20 **Alverine**
[150-59-4] MW 281.44



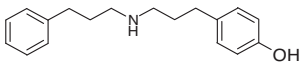
3756.20-K-IO	1000µg/mL isooctane, 1x1mL
3756.20-10MG	neat, 1x10mg

2877.18 **Di-(3-phenyl-1-propyl)amine**
[93948-20-0] MW 253.39



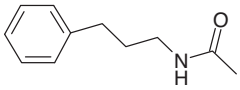
2877.18-K-IO	1000µg/mL isooctane, 1x1mL

2876.19 **N-(3-Phenylpropyl)-3-(4-hydroxyphenyl)propylamine**
MW 267.42



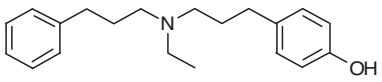
2876.19-K-IO	1000µg/mL isooctane, 1x1mL

2905.11 **N-(3-Phenylpropyl)acetamide**
[34059-10-4] MW 177.25



2905.11-K-IO	1000µg/mL isooctane, 1x1mL

2875.20 **N-Ethyl,N-(3-phenylpropyl)-3-(4-hydroxyphenyl)propylamine**
[142047-94-7] MW 297.44



2875.20-K-IO	1000µg/mL isooctane, 1x1mL

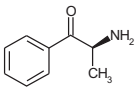
Buprenorphine

3757.29-K-IO	Buprenorphine	467.65	[52485-79-7]	1000µg/mL	isooctane	1 1mL
3758.25-K-IO	Norbuprenorphine	413.55	[78715-23-8]	1000µg/mL	isooctane	1 1mL

Cathinone

1456.9 **Cathinone**

[5265-18-9] MW 149.19

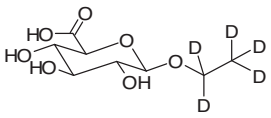


Please inquire

Ethanol

1627.8 **d5-Ethyl-β-D-6-glucuronide**

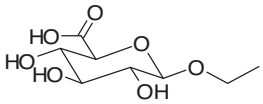
MW 227.23



1627.8-10MG neat, 1x10mg

1626.8 **Ethyl-β-D-6-glucuronide**

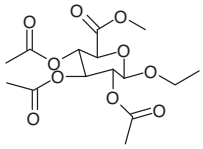
[17685-04-0] MW 222.20



1626.8-10MG neat, 1x10mg

2362.15 **Ethyl-β-D-6-triacetyl glucuronic acid methyl ester**

MW 362.34

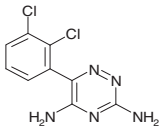


2362.15-10MG neat, 1x10mg

Lamotrigine

3922.9 **Lamotrigine**

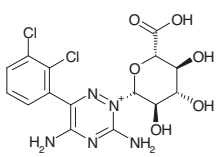
[84057-84-1] MW 256.09



Please inquire

3923.15 **Lamotrigine-2N-glucuronide**

[135288-68-5]

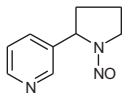


Please inquire

Nicotines

1702.9 **N-Nitrosonornicotine**

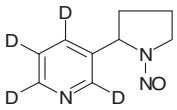
[16543-55-8] MW 177.21



1702.9-K-AN	1000μg/mL acetonitrile, 1x1mL
1702.9-K-2AN	1000μg/mL acetonitrile, 1x2mL

1706.9 **DL-N-Nitrosonornicotine-d4**

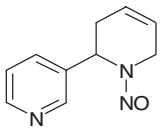
MW 181.23



1706.9-K-AN	1000μg/mL acetonitrile, 1x1mL
1706.9-K-2AN	1000μg/mL acetonitrile, 1x2mL
1706.9-K-4AN	1000μg/mL acetonitrile, 1x4mL
1706.9-10MG	neat, 1x10mg

1705.10 **(RS)-N-Nitrosoanatabine**

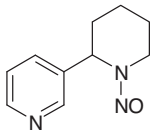
[71267-22-6] MW 189.22



1705.10-K-AN	1000μg/mL acetonitrile, 1x1mL
1705.10-K-2AN	1000μg/mL acetonitrile, 1x2mL

1704.10 **(RS)-N-Nitrosoanabasine**

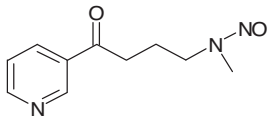
[37620-20-5] MW 191.23



1704.10-K-AN	1000μg/mL acetonitrile, 1x1mL
1704.10-K-2AN	1000μg/mL acetonitrile, 1x2mL

1703.10 **4-(N-Methyl-N-nitrosoamino)-1-(3-pyridyl)-1-butanone**

[64091-91-4] MW 207.23



1703.10-K-AN	1000μg/mL acetonitrile, 1x1mL
1703.10-K-2AN	1000μg/mL acetonitrile, 1x2mL

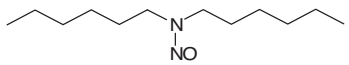
1707.10 **4-(N-Methyl-N-nitrosamino)-1-(3-pyridyl)-1-butanone-d4**

MW 211.26

1707.10-K-AN	1000μg/mL acetonitrile, 1x1mL
1707.10-K-4AN	1000μg/mL acetonitrile, 1x4mL
1707.10-10MG	neat, 1x10mg

2743.12 **N-Nitroso-di-n-hexylamine**

[6949-28-6] MW 214.35



2743.12-K-IP	1000μg/mL isopropanol, 1x1mL

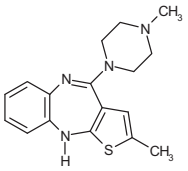
Morphine

1628.23-10MG	Morphine-6-glucuronide	447.45	20290-10-2	neat	neat	1	10mg

Olanzapine

3761.17 **Olanzapine**

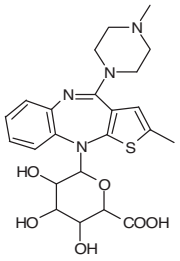
[132539-06-1] MW 312.43



3761.17-100MG	neat, 1x100mg
3761.17-250MG	neat, 1x250mg
3761.17-1G	neat, 1x1g

3924.23 **Olanzapine 10-N-glucuronide**

MW 490.58



Please inquire

Pethidine

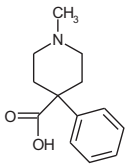
3763.15 **Pethidine**

[57-42-1] MW 247.33

Please inquire

2323.13 **Pethidinic acid**

[3627-48-3] MW 219.29



2323.13-10MG neat, 1x10mg

3764.14 **Norpethidine**

[77-17-8]

Please inquire

Pharmaceuticals and its impurities

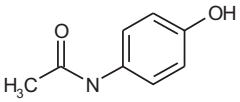
NEW

Acetaminophene

2524.8 **Acetaminophene (Paracetamol)**

4-Acetaminophenol

[103-90-2] MW 151.17

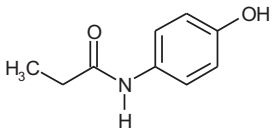


2524.8-K-ME	1000µg/mL methanol, 1x1mL
2524.8-500MG	neat, 1x500mg

2549.9 **N-(4-Hydroxyphenyl)-propionamide**

Imp. B (EP)

[1693-37-4] MW 165.19



2549.9-100-ME	100µg/mL methanol, 1x1mL
2549.9-100MG	neat, 1x100mg

2087.6 **4-Nitrophenol**

Imp. F (EP)

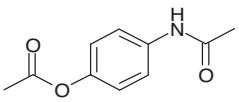
[100-02-7] MW 139.11

2087.6-K-ME	1000µg/mL methanol, 1x1mL
2087.6-100MG	neat, 1x100mg

2550.10 **N,O-Diacetyl-4-aminophenol**

Imp. H (EP)

[2633-33-8] MW 193.20

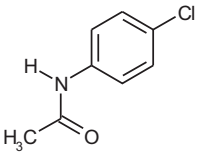


2550.10-100-ME	100µg/mL methanol, 1x1mL
2550.10-100MG	neat, 1x100mg

2512.8 **4'-Chloroacetanilide**

Imp. J (EP)

[539-03-7] MW 169.61



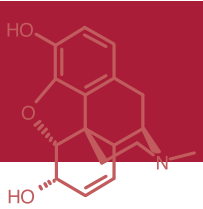
2512.8-K-ME	1000µg/mL methanol, 1x1mL
2512.8-100MG	neat, 1x100mg

2519.6 **4-Aminophenol**

Imp. K (EP)

[123-30-8] MW 109.13

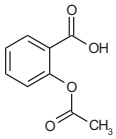
2519.6-K-ME	1000µg/mL methanol, 1x1mL
2519.6-500MG	neat, 1x500mg



Acetylsalicylic acid

2513.9 **Acetylsalicylic acid (Aspirin)**

[50-78-2] MW 180.16



2513.9-K-ME 1000μg/mL methanol, 1x1mL

2513.9-500MG neat, 1x500mg

2514.7 **4-Hydroxybenzoic acid**

Imp. A (EP)

[99-96-7] MW 138.12

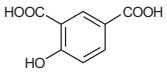
2514.7-K-ME 1000μg/mL methanol, 1x1mL

2514.7-100MG neat, 1x100mg

2539.8 **4-Hydroxyisophthalic acid (4-Hydroxybenzene-1,3-dicarboxylic acid)**

Imp. B (EP)

[636-46-4] MW 182.13



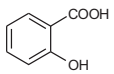
2539.8-K-ME 1000μg/mL methanol, 1x1mL

2539.8-100MG neat, 1x100mg

2515.7 **Salicylic acid (2-Hydroxybenzoic acid)**

Imp. C (EP)

[69-72-7] MW 138.12



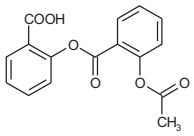
2515.7-K-ME 1000μg/mL methanol, 1x1mL

2515.7-500MG neat, 1x500mg

2516.16 **Acetylsalicylsalicylic acid**

Imp. D (EP)

[530-75-6] MW 300.27



2516.16-100-ME 100μg/mL methanol, 1x1mL

2516.16-10MG neat, 1x10mg

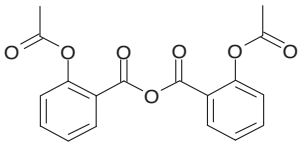
2516.16-25MG neat, 1x25mg

2516.16-100MG neat, 1x100mg

2551.18 **O-Acetylsalicylic anhydride**

Imp. F (EP)

[1466-82-6] MW 342.31



2551.18-100-ME 100μg/mL methanol, 1x1mL

2551.18-100MG neat, 1x100mg

2710.14 **2-(2,4-Dihydroxybenzoyl) benzoic acid**

[2513-33-9] MW 258.23

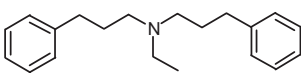
2710.14-100-ME 100μg/mL methanol, 1x1mL

Compounds

Alverine

3756.20 **Alverine**

[150-59-4] MW 281.44

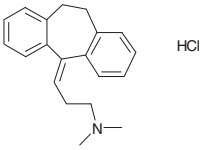


3756.20-K-IO	1000µg/mL isooctane, 1x1mL
3756.20-10MG	neat, 1x10mg

Amitriptyline

2543.20 **Amitriptyline hydrochloride**

[549-18-8] MW 313.87

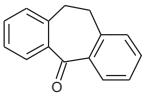


2543.20-K-ME	1000µg/mL methanol, 1x1mL
2543.20-100MG	neat, 1x100mg

2544.15 **Dibenzosuberone**

Imp. A (EP)

[1210-35-1] MW 208.26



2544.15-100-ME	100µg/mL methanol, 1x1mL
2544.15-100MG	neat, 1x100mg

2697.20 **Cyclobenzaprine hydrochloride**

Imp. B (EP)

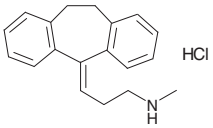
[6202-23-9] MW 311.86

2697.20-100-ME	100µg/mL methanol, 1x1mL
2697.20-100MG	neat, 1x100mg

2698.19 **Nortriptyline hydrochloride**

Imp. C (EP)

[894-71-3] MW 299.85



2698.19-100-ME	100µg/mL methanol, 1x1mL
2698.19-100MG	neat, 1x100mg

2711.20 **5-(3-Dimethylaminopropyl)-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-ol**

Imp. D (EP)

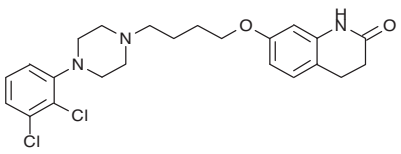
[1159-03-1] MW 295.43

2711.20-100-ME	100µg/mL methanol, 1x1mL

Aripiprazole

2305.23 **Aripiprazole**

[129722-12-9] MW 448.40

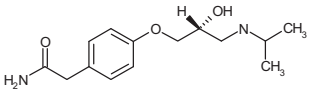


2305.23-100-AN 100µg/mL acetonitrile, 1x1mL

Atenolol

2545.14 **Atenolol**

[29122-68-7] MW 266.34



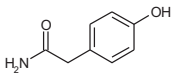
2545.14-K-ME 1000µg/mL methanol, 1x1mL

2545.14-500MG neat, 1x500mg

2521.8 **2-(4-Hydroxyphenyl)acetamide**

Imp. A (EP)

[17194-82-0] MW 151.17



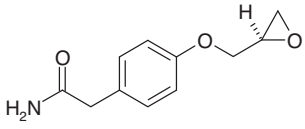
2521.8-K-ME 1000µg/mL methanol, 1x1mL

2521.8-100MG neat, 1x100mg

2725.11 **2-[4-[[(2RS)-2-Oxiran-2-yl]methoxy]phenyl]acetamide**

Imp. C (EP)

[29122-69-8] MW 207.23

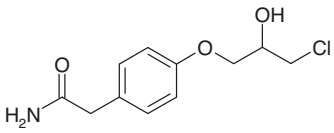


2725.11-100-IO 100µg/mL isooctane, 1x1mL

2712.11 **2-[4-[(2RS)-3-chloro-2-hydroxypropoxy]phenyl]acetamide**

Imp. D (EP)

[115538-83-5] MW 243.69

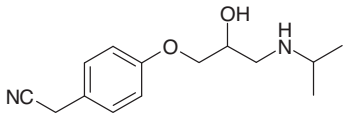


2712.11-100-ME 100µg/mL methanol, 1x1mL

2699.14 **2-[4-[(2RS)-2-Hydroxy-3[(1-methylethyl)amino]propoxy]phenyl]acetonitrile**

Imp. H (EP)

[29277-73-4] MW 248.33



2699.14-100-ME 100µg/mL methanol, 1x1mL

2699.14-100MG neat, 1x100mg

2522.8 **4-Hydroxyphenylacetic acid**

[156-38-7] MW 152.15

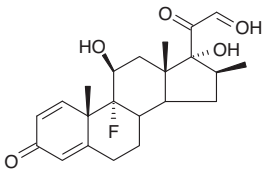
2522.8-K-ME 1000µg/mL methanol, 1x1mL

2522.8-100MG neat, 1x100mg

Betamethasone

2800.22 **Betamethasone**

[378-44-9] MW 388.48

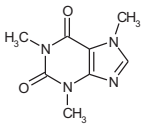


2800.22-5MG neat, 1x5mg

Caffeine

2517.8 **Caffeine**

[58-08-2] MW 194.19



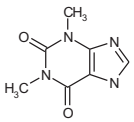
2517.8-K-ME 1000µg/mL methanol, 1x1mL

2517.8-500MG neat, 1x500mg

2518.7 **Theophylline**

Imp. A (EP)

[58-55-9] MW 180.17



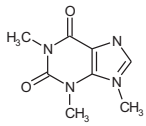
2518.7-100-ME 100µg/mL methanol, 1x1mL

2518.7-500MG neat, 1x500mg

2700.8 **Isocaffeine (1,3,9-Trimethylxanthine)**

Imp. C (EP)

[519-32-4] MW 196.21



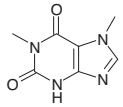
2700.8-K-ME 1000µg/mL methanol, 1x1mL

2700.8-10MG neat, 1x10mg

2700.8-25MG neat, 1x25mg

2540.7 **Paraxanthine**

[611-59-6] MW 188.23



2540.7-K-ME 1000µg/mL methanol, 1x1mL

2540.7-10MG neat, 1x10mg

2540.7-25MG neat, 1x25mg

2540.7-50MG neat, 1x50mg

Carbetocin

2324.45 **Carbetocin**

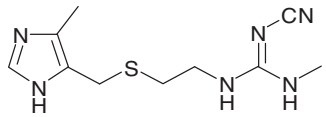
[37025-55-1] MW 988.18

2324.45-5MG neat, 1x5mg

Cimetidine

1634.10 **Cimetidine (free base)**

[51481-61-9] MW 252.34



1634.10-K-ME 1000µg/mL methanol, 1x1mL
1634.10-10MG neat, 1x10mg
1634.10-100MG neat, 1x100mg
1634.10-250MG neat, 1x250mg

2701.11 **Cimetidine hydrochloride**

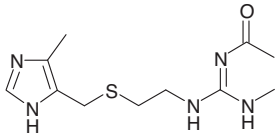
[70059-30-2] MW 291.85

2701.11-K-ME 1000µg/mL methanol, 1x1mL
2701.11-10MG neat, 1x10mg
2701.11-100MG neat, 1x100mg
2701.11-250MG neat, 1x250mg
2701.11-500MG neat, 1x500mg

1633.11 **Cimetidine carboxamide dihydrochloride (free base)**

Imp. C (EP)

[110592-19-3] MW 342.29

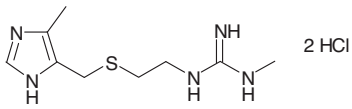


1633.11-100-ME 100µg/mL methanol, 1x1mL
1633.11-25MG neat, 1x25mg
1633.11-100MG neat, 1x100mg

1632.9 **Cimetidine guanidine derivative (N-Methyl-N′-[2-[[(5-methyl-H-imidazol-4-yl)-methyl]-thiol]-ethyl]-guanidine dihydrochloride)**

Imp. D (EP)

[59660-24-1] MW 300.26

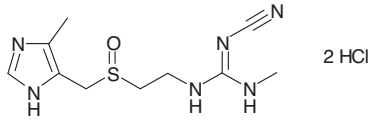


1632.9-100-ME 100µg/mL methanol, 1x1mL
1632.9-25MG neat, 1x25mg
1632.9-100MG neat, 1x100mg

1631.10 **Cimetidine sulphoxide dihydrochloride**

Imp. E (EP)

[54237-72-8] MW 341.26

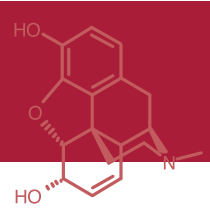


1631.10-100-ME 100µg/mL methanol, 1x1mL
1631.10-25MG neat, 1x25mg
1631.10-100MG neat, 1x100mg

2523.2 **Cyanoguanidine**

[461-58-5] MW 84.08

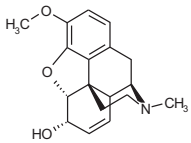
2523.2-K-ME 1000µg/mL methanol, 1x1mL
2523.2-100MG neat, 1x100mg



Codeine

1562.18 **Codeine (free base)**

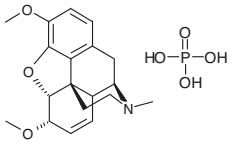
[76-57-3] MW 299.37



1562.18-K-ME	1000μg/mL methanol, 1x1mL
1562.18-10MG	neat, 1x10mg
1562.18-100MG	neat, 1x100mg
1562.18-250MG	neat, 1x250mg

1898.19 **6-O-Methylcodeine phosphate**

MW 411.40

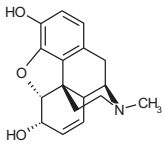


1898.19-100-ME	100μg/mL methanol, 1x1mL
1898.19-10MG	neat, 1x10mg
1898.19-25MG	neat, 1x25mg
1898.19-100MG	neat, 1x100mg
1898.19-250MG	neat, 1x250mg

1574.17 **Morphine (free base)**

Imp. B (EP)

[57-27-2] MW 285.35

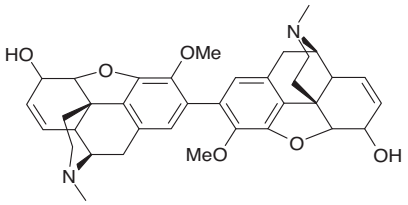


1574.17-K-ME	1000μg/mL methanol, 1x1mL
1574.17-10MG	neat, 1x10mg
1574.17-25MG	neat, 1x25mg
1574.17-100MG	neat, 1x100mg
1574.17-250MG	neat, 1x250mg
1574.17-2G	neat, 1x2g

1572.36 **Dimethyl pseudomorphine**

Imp. C (EP)

[121395-47-9] MW 596.73

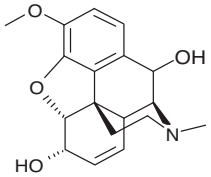


1572.36-100-ME	100μg/mL methanol, 1x1mL
1572.36-10MG	neat, 1x10mg
1572.36-100MG	neat, 1x100mg
1572.36-250MG	neat, 1x250mg

1566.18 **10-Hydroxycodeine (7,8-Didehydro-4,5a-epoxy-3-methoxy-17-methylmorphinan-6a,10-diol)**

Imp. E (EP)

[1777-89-5] MW 315.37

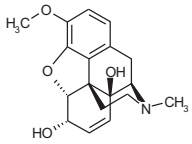


1566.18-100-ME	100μg/mL methanol, 1x1mL
1566.18-10MG	neat, 1x10mg
1566.18-25MG	neat, 1x25mg
1566.18-100MG	neat, 1x100mg
1566.18-250MG	neat, 1x250mg

1573.18 **14-Hydroxycodeine (7,8-Didehydro-4, 5a-epoxy-3-methoxy-17-methylmorphinan-6a,14-diol)**

Imp. F (EP)

[4829-46-3] MW 315.37

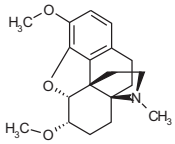


1573.18-100-ME	100µg/mL methanol, 1x1mL
1573.18-10MG	neat, 1x10mg
1573.18-100MG	neat, 1x100mg
1573.18-250MG	neat, 1x250mg

2702.19 **Thebaine**

Imp. G (EP)

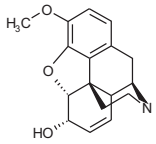
[115-37-7] MW 315.42



2702.19-100-ME	100µg/mL methanol, 1x1mL
2702.19-25MG	neat, 1x25mg
2702.19-50MG	neat, 1x50mg

1569.17 **Norcodeine**

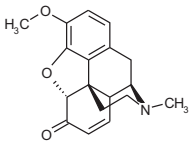
[467-15-2] MW 285.35



1569.17-K-ME	1000µg/mL methanol, 1x1mL
1569.17-10MG	neat, 1x10mg
1569.17-100MG	neat, 1x100mg
1569.17-250MG	neat, 1x250mg

1571.18 **Codeinone**

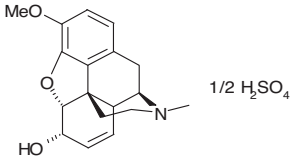
[467-13-0] MW 297.36



1571.18-100-ME	100µg/mL methanol, 1x1mL
1571.18-10MG	neat, 1x10mg
1571.18-25MG	neat, 1x25mg
1571.18-100MG	neat, 1x100mg
1571.18-250MG	neat, 1x250mg

1565.36 **Dicodeine sulfate**

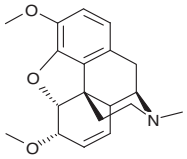
[1420-53-7] MW 299.37



1565.36-K-ME	1000µg/mL methanol, 1x1mL
1565.36-10MG	neat, 1x10mg
1565.36-100MG	neat, 1x100mg
1565.36-250MG	neat, 1x250mg

1568.19 **6-O-Methylcodeine**

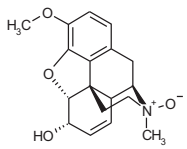
[2859-16-7] MW 313.40



1568.19-10MG	neat, 1x10mg
1568.19-100MG	neat, 1x100mg
1568.19-250MG	neat, 1x250mg

1567.18 **Codeine-N-oxide (free base)**

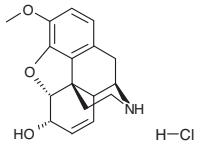
[3688-65-1] MW 315.37



1567.18-100-ME	100μg/mL methanol, 1x1mL
1567.18-10MG	neat, 1x10mg
1567.18-25MG	neat, 1x25mg
1567.18-100MG	neat, 1x100mg
1567.18-250MG	neat, 1x250mg

1899.17 **Norcodeine hydrochloride**

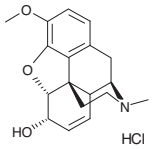
[14648-14-7] MW 321.81



1899.17-K-ME	1000μg/mL methanol, 1x1mL
1899.17-10MG	neat, 1x10mg
1899.17-25MG	neat, 1x25mg
1899.17-100MG	neat, 1x100mg

2546.20 **6-O-Acetylcodeine**

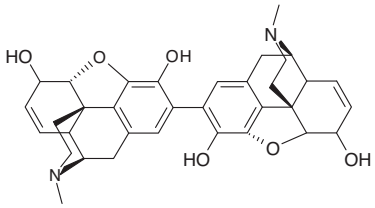
[6703-27-1] MW 341.41



2546.20-100-ME	100μg/mL methanol, 1x1mL
2546.20-10MG	neat, 1x10mg
2546.20-25MG	neat, 1x25mg

1570.34 **Pseudomorphine (free base)**

[125-24-6] MW 568.68

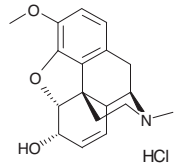


1570.34-100-ME	100μg/mL methanol, 1x1mL
1570.34-10MG	neat, 1x10mg
1570.34-25MG	neat, 1x25mg
1570.34-100MG	neat, 1x100mg
1570.34-250MG	neat, 1x250mg

Codeine hydrochloride dihydrate

1564.18 **Codeine hydrochloride**

[1422-07-7] MW 335.83

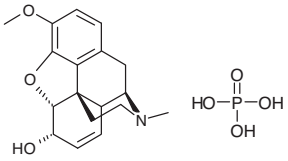


1564.18-K-ME	1000µg/mL methanol, 1x1mL
1564.18-10MG	neat, 1x10mg
1564.18-100MG	neat, 1x100mg
1564.18-250MG	neat, 1x250mg

Codeine phosphate hemihydrate

1563.18 **Codeine phosphate hemihydrate**

MW 397.37

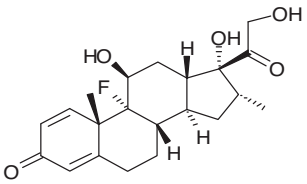


1563.18-K-ME	1000µg/mL methanol, 1x1mL
1563.18-10MG	neat, 1x10mg
1563.18-100MG	neat, 1x100mg
1563.18-250MG	neat, 1x250mg

Dexamethasone

2798.22 **Dexamethasone**

[50-02-2] MW 378.44

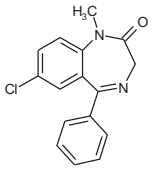


2798.22-100MG	neat, 1x100mg

Diazepam

2541.16 **Diazepam**

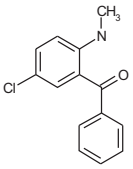
[439-14-5] MW 284.75



2541.16-K-ME	1000µg/mL methanol, 1x1mL
2541.16-25MG	neat, 1x25mg
2541.16-100MG	neat, 1x100mg

2542.14 **5-Chloro-2-(methylamino)benzophenone**

[1022-13-5] MW 245.71

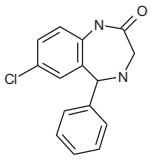


2542.14-K-ME	1000µg/mL methanol, 1x1mL
2542.14-100MG	neat, 1x100mg

2703.15 **Nordiazepam**

Desmethyldiazepam

[1088-11-5] MW 272.74



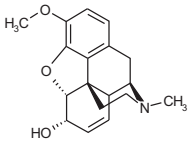
2703.15-100-ME	100µg/mL methanol, 1x1mL

Dihydrocodeine hydrogen tartrate

1562.18 **Codeine (free base)**

Imp. A (EP)

[76-57-3] MW 299.37

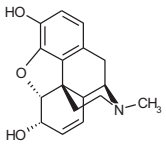


1562.18-K-ME	1000µg/mL methanol, 1x1mL
1562.18-10MG	neat, 1x10mg
1562.18-100MG	neat, 1x100mg
1562.18-250MG	neat, 1x250mg

1574.17 **Morphine (free base)**

Imp. B (EP)

[57-27-2] MW 285.35

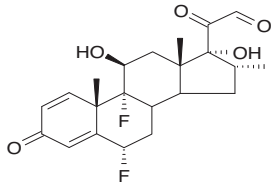


1574.17-K-ME	1000µg/mL methanol, 1x1mL
1574.17-10MG	neat, 1x10mg
1574.17-25MG	neat, 1x25mg
1574.17-100MG	neat, 1x100mg
1574.17-250MG	neat, 1x250mg
1574.17-2G	neat, 1x2g

Flumethasone

2799.22 **Flumethasone**

[2135-17-3] MW 406.47

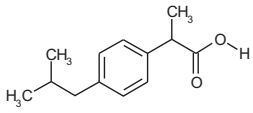


2799.22-5MG neat, 1x5mg

Ibuprofen

2525.13 **Ibuprofen**

[15687-27-1] MW 206.29



2525.13-K-ME 1000µg/mL methanol, 1x1mL

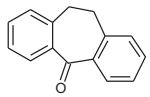
2525.13-100MG neat, 1x100mg

2525.13-500MG neat, 1x500mg

2544.15 **Dibenzosuberone**

Imp. A (EP)

[1210-35-1] MW 208.26

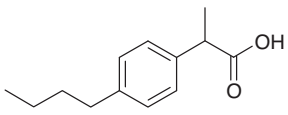


2544.15-100MG neat, 1x100mg

2532.13 **(2RS)-2-(4-Butylphenyl) propanoic acid**

Imp. B (EP)

[3585-49-7] MW 206.29



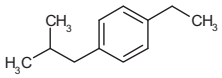
2532.13-100-ME 100µg/mL methanol, 1x1mL

2532.13-100MG neat, 1x100mg

2704.12 **1-Ethyl-4-(2-methylpropyl) benzene**

Imp. B2 (EP)

[100319-40-2] MW 162.28



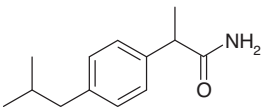
2704.12-100-ME 100µg/mL methanol, 1x1mL

2704.12-100MG neat, 1x100mg

2718.13 **(2RS)-2-[4-(2-Methylpropyl) phenyl]propanamide**

Imp. C (EP)

[59512-17-3] MW 205.30

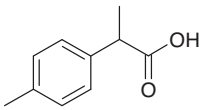


2718.13-100-ME 100µg/mL methanol, 1x1mL

2535.10 **(2RS)-2-(4-Methylphenyl) propanoic acid**

Imp. D (EP)

[938-94-3] MW 164.21

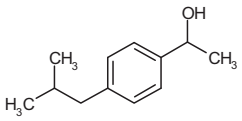


2535.10-K-ME	1000μg/mL methanol, 1x1mL
2535.10-100MG	neat, 1x100mg

2537.12 **(1-Hydroxyethyl)-4-(2-methylpropyl)benzene**

Imp. D2 (EP)

[40150-92-3] MW 178.28

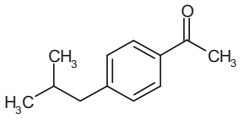


2537.12-100-ME	100μg/mL methanol, 1x1mL
2537.12-100MG	neat, 1x100mg

2547.12 **1-[4-(2-Methylpropyl) phenyl]ethanone**

Imp. E (EP)

[38861-78-8] MW 176.26

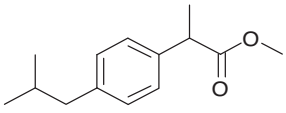


2547.12-100-ME	100μg/mL methanol, 1x1mL
2547.12-25MG	neat, 1x25mg
2547.12-100MG	neat, 1x100mg

2708.14 **Methyl-2-[4-(2-methylpropyl) phenyl]propanoate**

Imp. F2 (EP)

[61566-34-5] MW 220.31

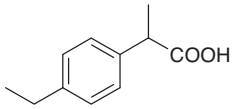


2708.14-100-ME	100μg/mL methanol, 1x1mL
2708.14-100MG	neat, 1x100mg

2533.11 **(2RS)-2-(4-Ethylphenyl) propanoic acid**

Imp. N (EP)

[3585-52-2] MW 178.23

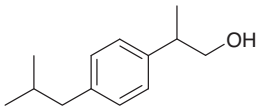


2533.11-100-ME	100μg/mL methanol, 1x1mL
2533.11-25MG	neat, 1x25mg
2533.11-100MG	neat, 1x100mg

2536.13 **(2RS)-2-[4-(2-Methylpropyl) phenyl]propan-1-ol**

Imp. P (EP)

[36039-36-8] MW 192.30

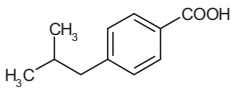


2536.13-100-ME	100μg/mL methanol, 1x1mL
2536.13-25MG	neat, 1x25mg
2536.13-100MG	neat, 1x100mg

2527.11 **4-Isobutylbenzoic acid**

Imp. S (EP)

[38861-88-0] MW 178.23

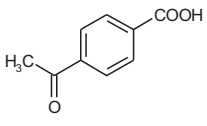


2527.11-100-ME	100μg/mL methanol, 1x1mL
2527.11-100MG	neat, 1x100mg

2526.9 **4-Acetylbenzoic acid**

Imp. U (EP)

[586-89-0] MW 164.16

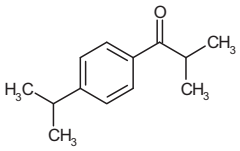


2526.9-100MG	neat, 1x100mg

2713.13 **2-Methyl-1-[4-(1-methylethyl) phenyl]-1-propanone**

Imp. W (EP)

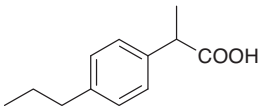
[72846-62-9] MW 190.29



2713.13-100-ME	100µg/mL methanol, 1x1mL
2713.13-25MG	neat, 1x25mg
2713.13-100MG	neat, 1x100mg

2534.12 **(2RS)-2-(4-n-Propylphenyl) propanoic acid**

[3585-47-5] MW 192.26

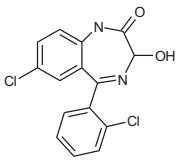


2534.12-100-ME	100µg/mL methanol, 1x1mL
2534.12-25MG	neat, 1x25mg
2534.12-100MG	neat, 1x100mg

Lorazepam

2548.15 **Lorazepam**

[846-49-1] MW 321.17

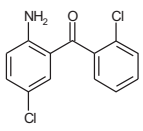


2548.15-100-ME	100µg/mL methanol, 1x1mL
2548.15-100MG	neat, 1x100mg

2360.13 **2-Amino-2',5-dichlorobenzophenone**

Imp. A (EP)

[2958-36-3] MW 266.13

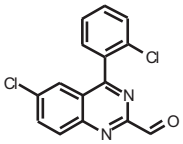


2360.13-100-ME	100µg/mL methanol, 1x1mL
2360.13-100MG	neat, 1x100mg

3804.15 **6-Chloro-4-(2-chlorophenyl)-2-quinazoline carboxaldehyde**

Imp. C(EP)

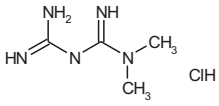
[93955-15-8]



3804.15-100-ME	100µg/mL methanol, 1mL
3804.15-25MG	neat, 25mg

1579.4 **Metformin hydrochloride**

[1115-70-4] MW 165.63



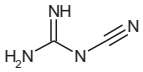
1579.4-K-ME	1000µg/mL methanol, 1x1mL
1579.4-100MG	neat, 1x100mg
1579.4-250MG	neat, 1x250mg
1579.4-1G	neat, 1x1g
1579.4-5G	neat, 1x5g
1579.4-10G	neat, 1x10g

1581.2 **Dicyanodiamide**

Cyanoguanidine

Imp. A (EP)

[461-58-5] MW 84.08



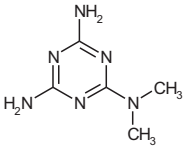
1581.2-100-ME	100µg/mL methanol, 1x1mL
1581.2-10MG	neat, 1x10mg
1581.2-100MG	neat, 1x100mg
1581.2-250MG	neat, 1x250mg

2709.5 **2,4-Diamino-6-dimethylamino-1,3,5-triazine**

N,N-Dimethyl-1,3,5-triazine-2,4,6-triamine

Imp. C (EP)

[1985-46-2] MW 154.18



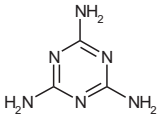
2709.5-100-ME	100µg/mL methanol, 1x1mL
2709.5-100MG	neat, 1x100mg

2528.3 **1,3,5-Triazine-2,4,6-triamine**

Melamine

Imp. D (EP)

[108-78-1] MW 126.12

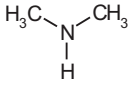


2528.3-100-ME	100µg/mL methanol, 1x1mL
2528.3-100MG	neat, 1x100mg

2705.2 **Dimethylamine**

Imp. F (EP)

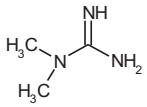
[124-40-3] MW 45.08



2705.2-K-MX	1000µg/mL water/metanol, 1x1mL
2705.2-90-ME	90µg/mL methanol, 1x1mL
2705.2-100MG	neat, 1x100mg

2758.3 **1,1-Dimethylguanidine**

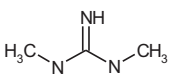
[6145-42-2] MW 87.13



Please inquire

1580.3 **Dimethylguanidine**

[3324-71-8] MW 87.13

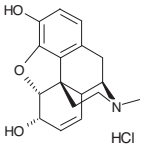


1580.3-100-ME	100µg/mL methanol, 1x1mL
1580.3-25MG	neat, 1x25mg
1580.3-100MG	neat, 1x100mg
1580.3-250MG	neat, 1x250mg

Morphine hydrochloride

1575.17 **Morphine hydrochloride**

[52-26-6] MW 321.81



1575.17-10MG	neat, 1x10mg
1575.17-100MG	neat, 1x100mg
1575.17-250MG	neat, 1x250mg

1574.17 **Morphine (free base)**

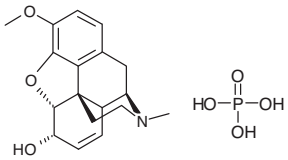
[57-27-2] MW 285.35

1574.17-K-ME	1000µg/mL methanol, 1x1mL
1574.17-10MG	neat, 1x10mg
1574.17-25MG	neat, 1x25mg
1574.17-100MG	neat, 1x100mg
1574.17-250MG	neat, 1x250mg
1574.17-2G	neat, 1x2g

1563.18 **Codeine phosphate hemihydrate**

Reference solution

MW 397.37



1563.18-K-ME	1000µg/mL methanol, 1x1mL
1563.18-10MG	neat, 1x10mg
1563.18-100MG	neat, 1x100mg
1563.18-250MG	neat, 1x250mg

1562.18 **Codeine**

Imp. A (EP), see page 398

1570.34 **Pseudomorphine (free base)**

Imp. B (EP)

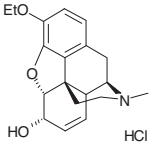
[125-24-6] MW 568.68

1570.34-100-ME	100µg/mL methanol, 1x1mL
1570.34-10MG	neat, 1x10mg
1570.34-25MG	neat, 1x25mg
1570.34-100MG	neat, 1x100mg
1570.34-250MG	neat, 1x250mg

Ethylmorphine hydrochloride

1576.19 **Ethylmorphine hydrochloride**

[76-58-4] MW 349.86

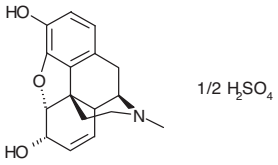


1576.19-10MG	neat, 1x10mg
1576.19-100MG	neat, 1x100mg
1576.19-250MG	neat, 1x250mg

Morphine sulfate

1897.34 **Dimorphine sulfate**

MW 285.35



1897.34-10MG	neat, 1x10mg
1897.34-100MG	neat, 1x100mg
1897.34-250MG	neat, 1x250mg

1563.18 **Codeine phosphate hemihydrate**

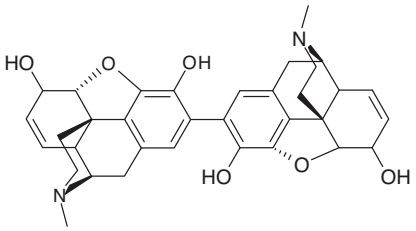
Reference solution, see page 407

1562.18 **Codeine**

Imp. A (EP), see page 398

1570.34 **Pseudomorphine (free base)**

Imp. B (EP)
[125-24-6] MW 568.68

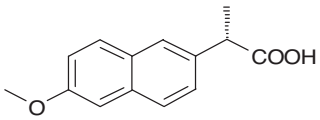


1570.34-100-ME	100µg/mL methanol, 1x1mL
1570.34-10MG	neat, 1x10mg
1570.34-25MG	neat, 1x25mg
1570.34-100MG	neat, 1x100mg
1570.34-250MG	neat, 1x250mg

Naproxen

2538.14 **Naproxen**

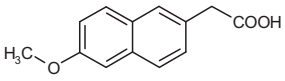
[22204-53-1] MW 230.27



2538.14-100-ME	100µg/mL methanol, 1x1mL
2538.14-100MG	neat, 1x100mg

2531.13 **(6-Methoxy-2-naphthyl) acetic acid**

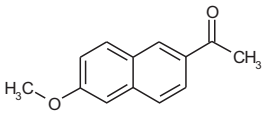
Imp. I (EP)
[23981-47-7] MW 216.24



2531.13-100MG	neat, 1x100mg

2529.13 **2-Acetyl-6-methoxynaphthalene**

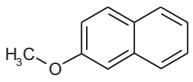
Imp. L (EP)
[3900-45-6] MW 200.24



2529.13-100-ME	100µg/mL methanol, 1x1mL
2529.13-100MG	neat, 1x100mg

2530.11 **2-Methoxynaphthalene**

Imp. M (EP)
[93-04-9] MW 158.20

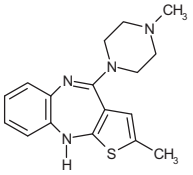


2530.11-100-ME	100µg/mL methanol, 1x1mL
2530.11-100MG	neat, 1x100mg

Olanzapine

3761.17 **Olanzapine**

[132539-06-1] MW 312.43

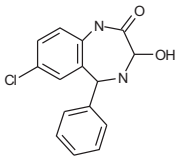


3761.17-100MG	neat, 1x100mg
3761.17-250MG	neat, 1x250mg
3761.17-1G	neat, 1x1g

Oxazepam

2706.15 **Oxazepam**

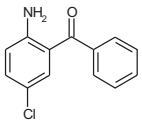
[604-75-1] MW 288.74



2706.15-K-ME	1000µg/mL methanol, 1x1mL
2706.15-10MG	neat, 1x10mg
2706.15-25MG	neat, 1x25mg

2520.13 **2-Amino-5-chlorobenzophenone**

[719-59-5] MW 231.68

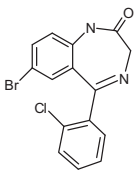


2520.13-K-ME	1000µg/mL methanol, 1x1mL
2520.13-100MG	neat, 1x100mg

Phenazepam

2211.15 **Phenazepam**

[51753-57-2] MW 349.62

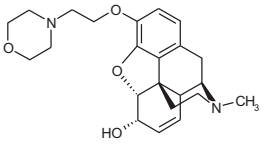


2211.15-K-T	1000µg/mL toluene, 1x1mL
2211.15-10MG	neat, 1x10mg
2211.15-50MG	neat, 1x50mg
2211.15-100MG	neat, 1x100mg

Pholcodine

1577.23 **Pholcodine**

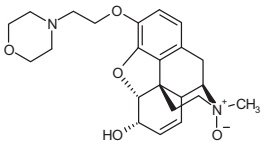
[509-67-1] MW 398.51



1577.23-100-ME	100µg/mL methanol, 1x1mL
1577.23-10MG	neat, 1x10mg
1577.23-100MG	neat, 1x100mg
1577.23-250MG	neat, 1x250mg

1578.23 **Pholcodine-N-oxide**

[433308-89-5] MW 414.51

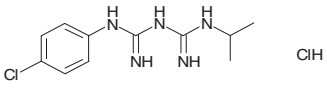


1578.23-5MG	neat, 1x5mg
1578.23-25MG	neat, 1x25mg
1578.23-100MG	neat, 1x100mg

Proguanil hydrochloride

1582.11 **Proguanil hydrochloride**

[637-32-1] MW 290.20



1582.11-10MG	neat, 1x10mg
1582.11-100MG	neat, 1x100mg
1582.11-250MG	neat, 1x250mg

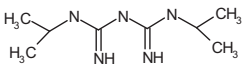
1427.6 **Phenol**

Imp. C (EP)
[108-95-2] MW 94.11

1427.6-K-ME	1000µg/mL methanol, 1x1mL
1427.6-1G	neat, 1x1g

2105.8 **1,5-Bis-(1-methylethyl)-biguanide**

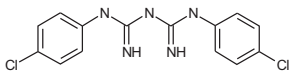
[45095-69-0] MW 185.27



2105.8-100-ME	100µg/mL methanol, 1x1mL
2105.8-25MG	neat, 1x25mg
2105.8-100MG	neat, 1x100mg

2106.14 **1,5-Bis-(4-chlorophenyl)-biguanide HCl**

[13590-88-0] MW 322.20



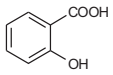
2106.14-100-ME	100µg/mL methanol, 1x1mL
2106.14-25MG	neat, 1x25mg
2106.14-100MG	neat, 1x100mg

Salicylic acid

2515.7 **Salicylic acid**

2-Hydroxybenzoic acid

[69-72-7] MW 138.12



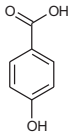
2515.7-K-ME 1000µg/mL methanol, 1x1mL

2515.7-500MG neat, 1x500mg

2514.7 **4-Hydroxybenzoic acid**

Imp. A (EP)

[99-96-7] MW 138.12



2514.7-K-ME 1000µg/mL methanol, 1x1mL

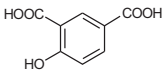
2514.7-100MG neat, 1x100mg

2539.8 **4-Hydroxyisophthalic acid**

4-Hydroxybenzene-1,3-dicarboxylic acid

Imp. B (EP)

[636-46-4] MW 182.13



2539.8-K-ME 1000µg/mL methanol, 1x1mL

2539.8-100MG neat, 1x100mg

1427.6 **Phenol**

Imp. C (EP)

[108-95-2] MW 94.11

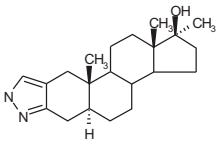
1427.6-K-ME 1000µg/mL methanol, 1x1mL

1427.6-1G neat, 1x1g

Stanozol

2803.21 **Stanozol**

[10418-03-8] MW 328.50

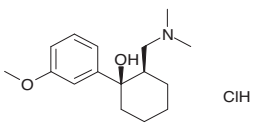


2803.21-100MG neat, 1x100mg

Tramadol hydrochloride

2707.16 **Tramadol hydrochloride**

[36282-47-0] MW 299.84

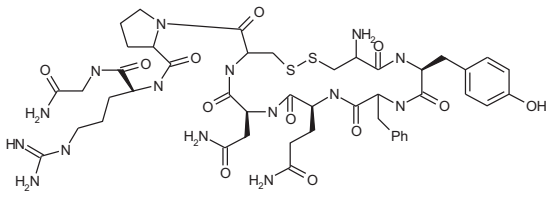


2707.16-100-ME 100µg/mL methanol, 1x1mL

Vasopressin

2306.46 **(Arg8)-Vasopressin acetate salt**

[113-79-1] MW 1084.25



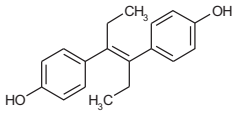
2306.46-1MG neat, 1x1mg

Natural products

Steroids and sterols

2801.18 **Diethylstilbestrol**

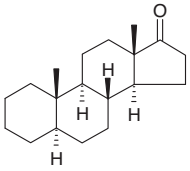
[56-53-1] MW 268.36



2801.18-100MG neat, 1x100mg

1286.19 **5α(H)-Androstan-17-one**

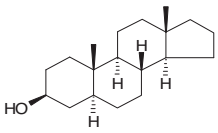
[963-74-6] MW 274.45



1286.19-10MG neat, 1x10mg

1283.19 **5α(H)-Androstan-3β-ol**

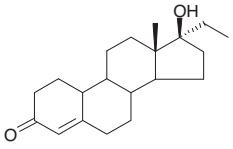
[1224-92-6] MW 276.47



1283.19-10MG neat, 1x10mg

2802.20 **Norethandrolone**

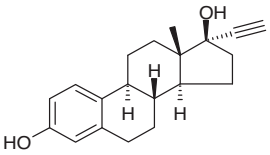
[52-78-8] MW 304.48



2802.20-100MG neat, 1x100mg

3623.20 **17α-Ethynylestradiol**

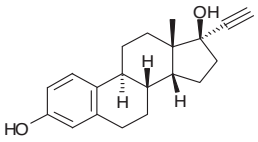
[57-63-6] MW 296.41



3623.20-10MG neat, 1x10mg

2903.20 **17 β-Ethynylestradiol**

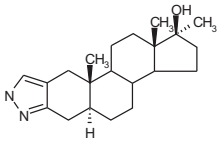
[4717-38-8] MW 296.41



2903.20-10MG neat, 1x10mg

2803.21 **Stanozol**

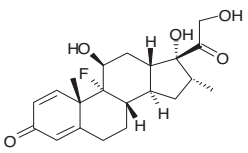
[10418-03-8] MW 328.50



2803.21-100MG neat, 1x100mg

2798.22 **Dexamethasone**

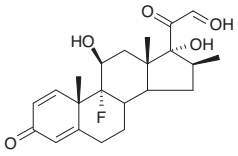
[50-02-2] MW 378.44



2798.22-100MG neat, 1x100mg

2800.22 **Betamethasone**

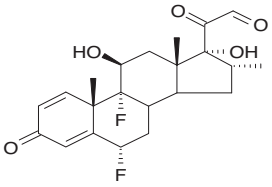
[378-44-9] MW 388.48



2800.22-5MG neat, 1x5mg

2799.22 **Flumethasone**

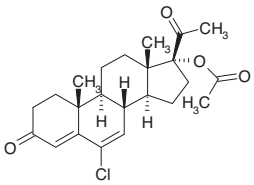
[2135-17-3] MW 406.47



2799.22-5MG neat, 1x5mg

2797.23 **Chlormadinone acetate**

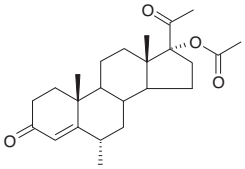
[302-22-7] MW 402.97



2797.23-1G neat, 1x1g

2804.24 **Medroxyprogesterone acetate**

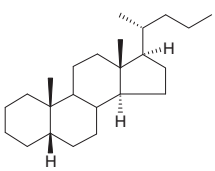
[71-58-9] MW 386.54



2804.24-100MG neat, 1x100mg

0641.24 **5β(H)-Cholane**

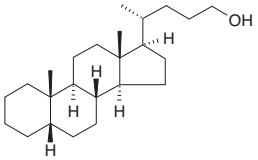
[80373-86-0] MW 330.60



0641.24-K-IO 1000µg/mL isooctane, 1x1mL

1197.24 **5β(H)-Cholan-24-ol**

[3110-99-4] MW 346.60

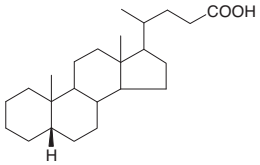


1197.24-10MG neat, 1x10mg

1197.24-25MG neat, 1x25mg

1196.24 **5β(H)-Cholanic acid**

[546-18-9] MW 360.59



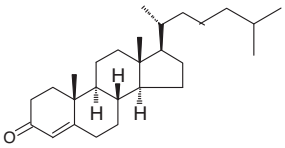
1196.24-10MG neat, 1x10mg

1196.24-100MG neat, 1x100mg

1196.24-1G neat, 1x1g

3661.27 **Cholest-4-ene-3-one**

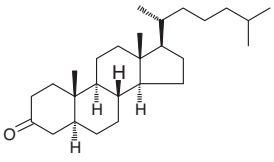
[601-57-0] MW 384.00



3661.27-10MG neat, 1x10mg

3624.27 **5α(H)-Cholestan-3-one**

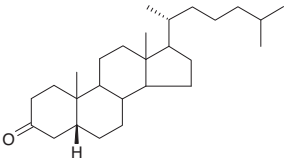
[15600-08-5] MW 386.67



3624.27-10MG neat, 1x10mg

2740.27 **5β(H)-Cholestan-3-one**

[601-53-6] MW 386.67



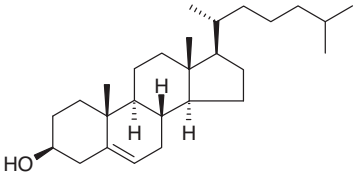
2740.27-10MG neat, 1x10mg

Compounds

2900.27 **Cholest-5-en-3β-ol**

Cholesterol

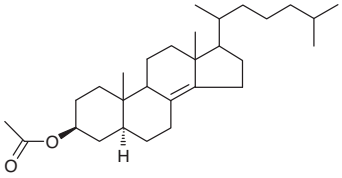
[57-88-5] MW 386.67



2900.27-10MG neat, 1x10mg

2694.29 **5α(H),17α(H),(20R)-3β-Acetoxycholest-8(14)-ene**

[6562-21-6] MW 428.70

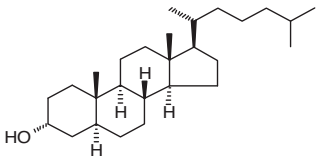


2694.29-K-IO 1000μg/mL isooctane, 1x1mL

2731.27 **5α(H)-Cholestan-3α-ol**

epi-Cholestanol

[16720-60-8] MW 388.68

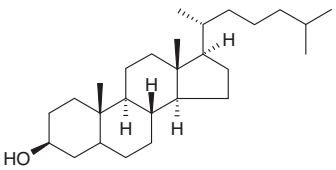


2731.27-10MG neat, 1x10mg

2795.27 **5α(H)-Cholestan-3β-ol**

Cholestanol

[80-97-7] MW 388.68

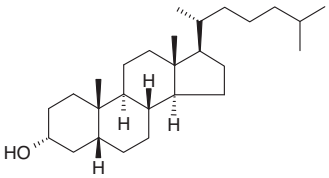


2795.27-10MG neat, 1x10mg

2730.27 **5β(H)-Cholestan-3α-ol**

epi-Coprostanol

[516-92-7] MW 388.68

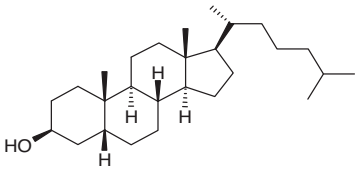


2730.27-10MG neat, 1x10mg

2351.27 **5β(H)-Cholestan-3β-ol**

Coprostanol

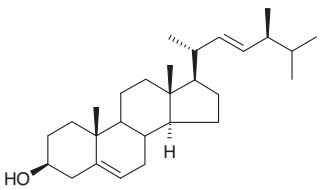
[360-68-9] MW 388.68



2351.27-10MG neat, 1x10mg

2734.28 **Brassicasterol**

[474-67-9] MW 398.68

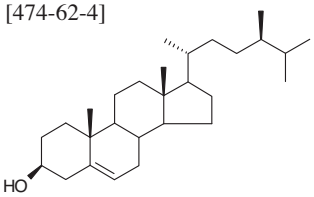


2734.28-5MG neat, 1x5mg

2734.28-100-IO 100μg/mL isooctane, 1x1mL

3913.28 **Campesterol**

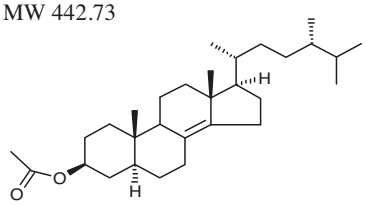
[474-62-4]



3913.28-100-HX 100μg/mL hexane, 1x1mL

2724.30 **5α(H),17α(H),(20R)-3β-Acetoxyergost-8(14)-ene**

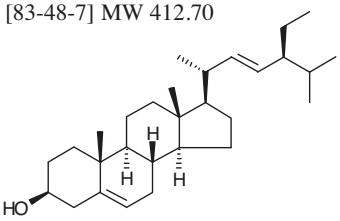
MW 442.73



2724.30-100-IO 100μg/mL isooctane, 1x1mL

3767.29 **Stigmasterol**

[83-48-7] MW 412.70

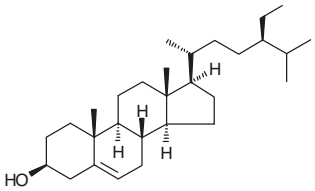


3767.29-10MG neat, 1x10mg

2732.29 **24-Ethylcholest-5-en-3β-ol**

α-Sitosterol

[83-46-5] MW 414.72

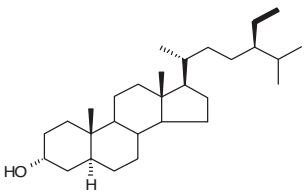


2732.29-10MG neat, 1x10mg

3768.29 **24-Ethyl-5α(H)-cholestan-3α-ol**

24-ethylepicholestanol

epi-Stigmastanol



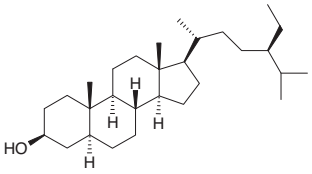
3768.29-10MG neat, 1x10mg

2717.29 **24-Ethyl-5α(H)-cholestan-3β-ol**

α-Sitostanol

Stigmastanol

[19466-47-8] MW 416.74

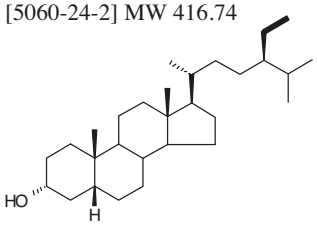


2717.29-10MG neat, 1x10mg

3582.29 **24-Ethyl-5β(H)-cholestan-3α-ol**

24-Ethyl-epi-coprostanol

[5060-24-2] MW 416.74

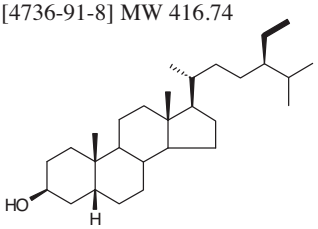


3582.29-10MG neat, 1x10mg

3047.29 **24-Ethyl-5β(H)-cholestan-3β-ol**

24-Ethylcoprostanol

[4736-91-8] MW 416.74

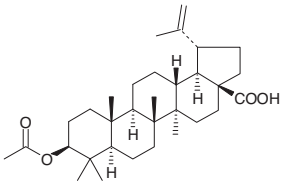


3047.29-10MG neat, 1x10mg

Triterpenoids

1618.32 **3β-Acetoxybetulinic acid**

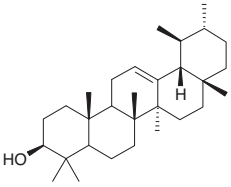
[10376-50-8] MW 498.75



1618.32-10MG neat, 1x10mg

0555.30 **α-Amyrine**

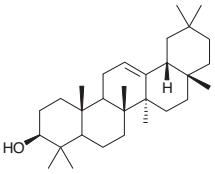
[638-95-9] MW 426.73



0555.30-10MG neat, 1x10mg

0566.30 **β-Amyrine**

[559-70-6] MW 426.73



0566.30-10MG neat, 1x10mg

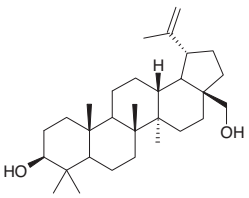
8100.37 **3β-Benzoyloxy-18β(H)-olean-12-one**

[106386-89-4]

8100.37-10MG neat, 1x10mg

1583.30 **Betulin**

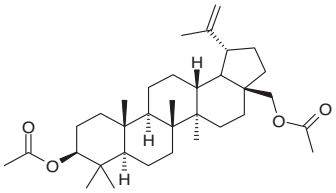
[473-98-3] MW 442.73



1583.30-10MG neat, 1x10mg

1282.34 **Betulin diacetate**

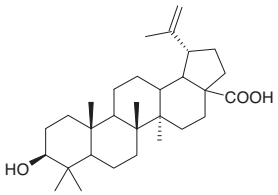
[1721-69-3] MW 526.81



1282.34-10MG neat, 1x10mg

1281.30 **Betulinic Acid**

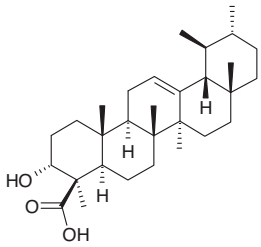
[472-15-1] MW 456.72



1281.30-10MG neat, 1x10mg

1617.30 **β-Boswellic acid**

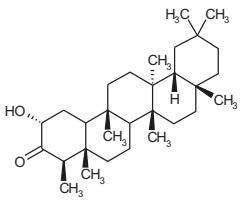
[631-69-6] MW 456.72



1617.30-10MG neat, 1x10mg

0569.30 **Cerin**

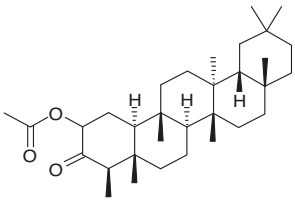
[468-67-7] MW 442.73



0569.30-10MG neat, 1x10mg

0424.32 **Cerin acetate**

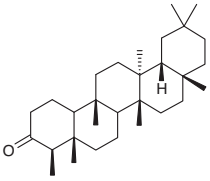
[17947-01-2] MW 484.77



0424.32-10MG neat, 1x10mg

1586.30 **Friedelan-3α-ol**

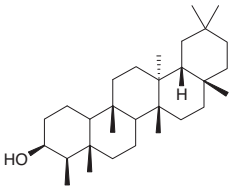
[5085-72-3] MW 428.75



1586.30-2MG neat, 1x2mg

1585.30 **Friedelan-3β-ol**

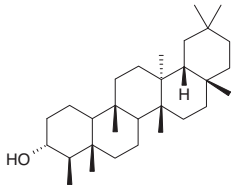
[16844-71-6] MW 428.75



1585.30-2MG neat, 1x2mg

0568.30 **Friedelin**

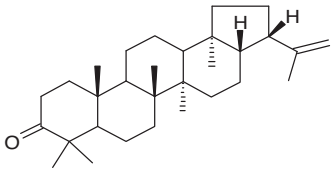
[559-74-0] MW 426.73



0568.30-10MG neat, 1x10mg

1682.30 **17β(H),21β(H)-Hop-22(29)-en-3-one**

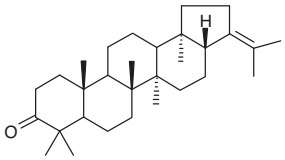
[25615-11-6] MW 424.72



1682.30-100-IO 100µg/mL isooctane, 1x1mL

1681.30 **17β(H)-Hop-21(22)-en-3-one**

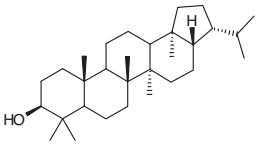
[17152-56-6] MW 424.72



1681.30-100-IO 100µg/mL isooctane, 1x1mL

1392.30 **3α(H),17β(H),21β(H)-3-Hydroxyhopane**

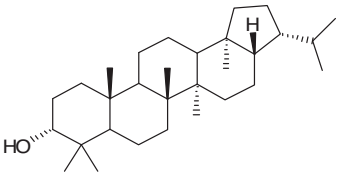
[28196-47-6] MW 428.75



1392.30-100-IO 100µg/mL isooctane, 1x1mL

1504.30 **3β(H),17β(H),21β(H)-3-Hydroxyhopane**

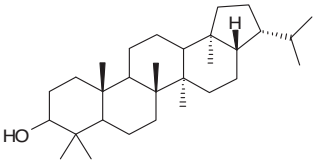
MW 428.75



1504.30-100-IO 100µg/mL isooctane, 1x1mL

1505.30 **(3α(H)+3β(H)),17β(H),21β(H)-3-Hydroxyhopane**

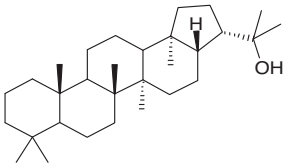
[28196-47-6] MW 428.75



1505.30-100-IO 100µg/mL isooctane, 1x1mL

1391.30 **17β(H),21β(H)-22-Hydroxyhopane**

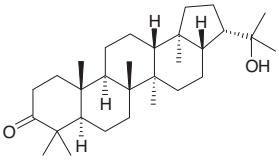
[1721-59-1] MW 428.75



1391.30-1MG neat, 1x1mg

2104.30 **Hydroxyhopanone**

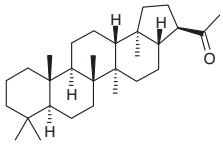
[1981-81-3] MW 442.73



2104.30-100-IO 100μg/mL isooctane, 1x1mL

0543.29 **Isoadiantone**

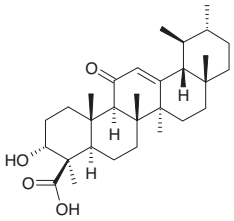
[54352-47-5] MW 412.71



0543.29-100-IO 100μg/mL isooctane, 1x1mL

1619.30 **11-Keto-β-boswellic acid**

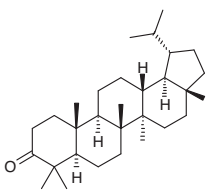
[17019-92-0] MW 470.70



1619.30-10MG neat, 1x10mg

0637.30 **Lup-3-one**

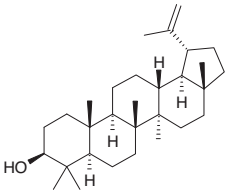
[3186-72-9] MW 426.73



0637.30-5MG neat, 1x5mg

1280.30 **Lupeol**

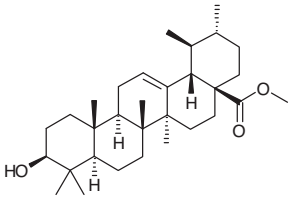
[545-47-1] MW 426.73



1280.30-10MG neat, 1x10mg

1620.31 **Methyl ursolate**

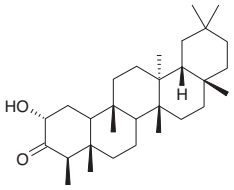
[32208-45-0] MW 470.74



1620.31-10MG neat, 1x10mg

0563.30 **18β(H)-Olean-12-en-3-one**

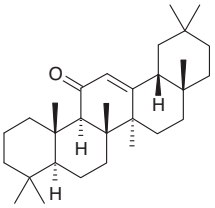
[638-97-1] MW 424.72



0563.30-2MG neat, 1x2mg

0639.30 **Olean-12-en-11-one**

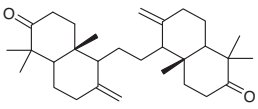
[10070-81-2] MW 424.72



0639.30-2MG neat, 1x2mg

0576.30 **α-Onocera-8,14-dien-3,21-dione**

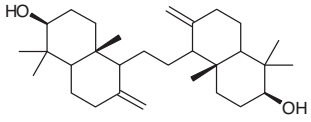
[6929-24-4] MW 438.70



0576.30-2MG neat, 1x2mg

0577.30 **α-Onocerin**

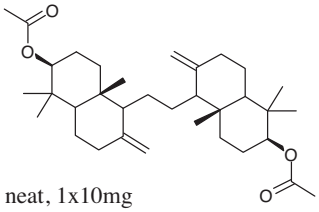
[511-01-3] MW 442.73



0577.30-10MG neat, 1x10mg

0640.34 **α-Onocerin diacetate**

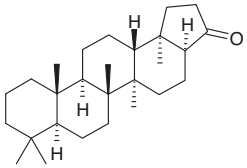
[34434-99-6] MW 526.81



0640.34-10MG neat, 1x10mg

0545.27 **22,29,30-Trisnor-17α(H)-hopan-21-one**

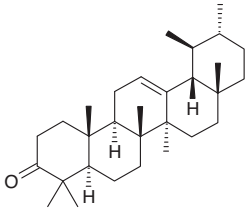
[1172-78-7] MW 384.65



0545.27-100-IO 100μg/mL isooctane, 1x1mL

0551.30 **Urs-12-en-3-one**

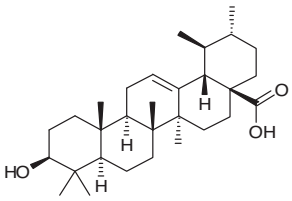
[638-96-0] MW 424.72



0551.30-10MG neat, 1x10mg

1287.30 **Ursolic acid**

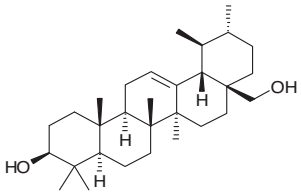
[77-52-1] MW 456.72



1287.30-10MG neat, 1x10mg

1621.30 **Uvaol**

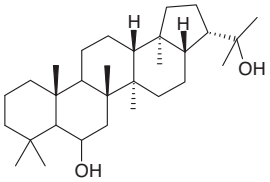
[545-46-0] MW 442.73



1621.30-10MG neat, 1x10mg

0166.30 **Zeorine**

[22570-53-2] MW 444.75



0166.30-5MG neat, 1x5mg

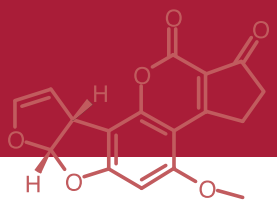
0166.30-10MG neat, 1x10mg

Carotenoids

See the Food safety section, pages 216-217.

Alkaloids

See Pyrrolizidine- and ergot alkaloids, page 421.

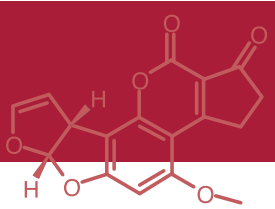


Food safety and analysis

Mycotoxins

NEW

2240.17-100-AN	3-Acetyldeoxynivalenol	3-AcDON	338.36	[50722-38-8]	100µg/mL	acetonitrile	1	1mL
2240.17-100-5AN	3-Acetyldeoxynivalenol	3-AcDON	338.36	[50722-38-8]	100µg/mL	acetonitrile	1	5mL
2240.17-5MG	3-Acetyldeoxynivalenol	3-AcDON	338.36	[50722-38-8]	neat		1	5mg
2240.17-10MG	3-Acetyldeoxynivalenol	3-AcDON	338.36	[50722-38-8]	neat		1	10mg
3630.17-25-AN	U{13C17}-3-Acetyl-dexoynivalenol				25µg/mL	acetonitrile	1	1.2mL
2247.17-100-AN	15-Acetyldeoxynivalenol	15-AcDON	322.36	[88337-96-6]	100µg/mL	acetonitrile	1	1mL
2247.17-100-5AN	15-Acetyldeoxynivalenol	15-AcDON	322.36	[88337-96-6]	100µg/mL	acetonitrile	1	5mL
2247.17-5MG	15-Acetyldeoxynivalenol	15-AcDON	322.36	[88337-96-6]	neat		1	5mg
2247.17-10MG	15-Acetyldeoxynivalenol	15-AcDON	322.36	[88337-96-6]	neat		1	10mg
2233.17-2-AN	Aflatoxin B1	AFB1	312.28	[1162-65-8]	2µg/mL	acetonitrile	1	1mL
2233.17-2-5AN	Aflatoxin B1	AFB1	312.28	[1162-65-8]	2µg/mL	acetonitrile	1	5mL
3636.-2MG	Aflatoxin B1 - BSA conjugate				neat		1	2mg
2234.17-050-AN	Aflatoxin B2	AFB2	314.30	[7220-81-7]	0.5 µg/ml	acetonitrile	1	1mL
2234.17-050-5AN	Aflatoxin B2	AFB2	314.30	[7220-81-7]	0.5 µg/ml	acetonitrile	1	5mL
2235.17-2-AN	Aflatoxin G1	AFG1	328.28	[1165-39-5]	2µg/mL	acetonitrile	1	1mL
2235.17-2-5AN	Aflatoxin G1	AFG1	328.28	[1165-39-5]	2µg/mL	acetonitrile	1	5mL
2236.17-050-AN	Aflatoxin G2	AFG2	330.30	[7241-98-7]	0.5µg/ml	acetonitrile	1	1mL
2236.17-050-5AN	Aflatoxin G2	AFG2	330.30	[7241-98-7]	0.5µg/ml	acetonitrile	1	5mL
2237.17-050-AN	Aflatoxin M1	AFM1	328.28	[6795-23-9]	0.5 µg/ml	acetonitrile	1	1mL
2237.17-050-5AN	Aflatoxin M1	AFM1	328.28	[6795-23-9]	0.5 µg/ml	acetonitrile	1	5mL
3769.17-1MG	Aflatoxin M2	AFM2	330.29	[6885-57-0]	neat		1	1mg
S-4296-2-AN	MIX 1Aflatoxin mixture				2µg/ml	acetonitrile	1	1mL
S-4296-2-5AN	MIX 1Aflatoxin mixture				2µg/ml	acetonitrile	1	5mL
S-4452-025-AN	MIX2 Aflatoxins				0.25µg/ml	acetonitrile	1	1mL
S-4452-025-5AN	MIX2 Aflatoxins				0.25 µg/ml	acetonitrile	1	5mL
2245.15-25-AN	Deepoxydeoxynivalenol	DOM-1	280.32	[88054-24-4]	25µg/mL	acetonitrile	1	1mL
2245.15-25-5AN	Deepoxydeoxynivalenol	DOM-1	280.32	[88054-24-4]	25µg/mL	acetonitrile	1	5mL
2239.15-100-AN	Deoxynivalenol	DON	296.32	[514181-10-8]	100µg/mL	acetonitrile	1	1mL
2239.15-100-5AN	Deoxynivalenol	DON	296.32	[514181-10-8]	100µg/mL	acetonitrile	1	5mL
2239.15-5MG	Deoxynivalenol	DON	296.32	[514181-10-8]	neat		1	5mg
2239.15-10MG	Deoxynivalenol	DON	296.32	[514181-10-8]	neat		1	10mg
3628.-2MG	Deoxynivalenol - BSA Conjugate				neat		1	2mg
3629.21-50-AN	Deoxynivalenol-3-glucoside		458.46	[131180-21-7]	50µg/mL	acetonitrile	1	1mL
3627.15-25-AN	U{13C15}-Dexoynivalenol				25µg/mL	acetonitrile	1	1.2mL
3802-100G	Maize fluor, dexoxynivalenol 474 30µg/kg				neat		1	100g
2249.19-100-AN	Diacetoxyscirpenol	DAS	366.41	[2270-40-8]	100 µg/mL	acetonitrile	1	1mL
2249.19-100-5AN	Diacetoxyscirpenol	DAS	366.41	[2270-40-8]	100 µg/mL	acetonitrile	1	5mL
2244.34-50-MX	Fumonisin B1	FB1	721.85	[116355-83-0]	50µg/mL	acetonitrile/ water (50/50)	1	1mL
2244.34-50-5MX	Fumonisin B1	FB1	721.85	[116355-83-0]	50µg/mL	acetonitrile/ water (50/50)	1	5mL
2244.34-5MG	Fumonisin B1	FB1	721.85	[116355-83-0]	neat		1	5mg
2244.34-10MG	Fumonisin B1	FB1	721.85	[116355-83-0]	neat		1	10mg
3625.34-25-AN	U{13C34}Fumonisin B1				25µg/mL	acetonitrile	1	1.2mL
2246.34-50-MX	Fumonisin B2	FB2	705.85	[116355-84-1]	50µg/mL	acetonitrile/ water (50/50)	1	1mL
2246.34-50-5MX	Fumonisin B2	FB2	705.85	[116355-84-1]	50µg/mL	acetonitrile/ water (50/50)	1	5mL
3626.34-50-MX	Fumonisin B3	FB3	705.83	[136379-59-4]	50µg/mL	acetonitrile/ water (50/50)	1	1mL
S-4298-50-MX	Fumosinin Mixture (FB1 & FB2)	FB1&FB2			50µg/mL	acetonitrile/ water (50/50)	1	1mL
S-4298-50-5MX	Fumosinin Mixture (FB1 & FB2)	FB1&FB2			50µg/mL	acetonitrile/ water (50/50)	1	5mL
2243.17-100-AN	Fusarenon-X	FusX	354.36	[23255-69-8]	100µg/mL	acetonitrile	1	1mL
2243.17-100-5AN	Fusarenon-X	FusX	354.36	[23255-69-8]	100µg/mL	acetonitrile	1	5mL
2243.17-5MG	Fusarenon-X	FusX	354.36	[23255-69-8]	neat		1	5mg



2243.17-10MG	Fusarenon-X	FusX	354.36	[23255-69-8]	neat		1	10mg
2248.22-100-AN	HT-2 Toxin	HT-2	424.50	[26934-87-2]	100 µg/mL	acetonitrile	1	1mL
2248.22-100-5AN	HT-2 Toxin	HT-2	424.50	[26934-87-2]	100 µg/mL	acetonitrile	1	5mL
3635.22-25-AN	U{13C22}-HT-2 Toxin		424.50		25µg/mL	acetonitrile	1	1.2mL
2242.19-100-AN	Neosolaniol	NEO	382.41	[36519-25-2]	100 µg/mL	acetonitrile	1	1mL
2242.19-100-5AN	Neosolaniol	NEO	382.41	[36519-25-2]	100 µg/mL	acetonitrile	1	5mL
2242.19-5MG	Neosolaniol	NEO	382.41	[36519-25-2]	neat		1	5mg
2242.19-10MG	Neosolaniol	NEO	382.41	[36519-25-2]	neat		1	10mg
2230.15-100-AN	Nivalenol	NIV	312.32	[23282-20-4]	100µg/mL	acetonitrile	1	1mL
2230.15-100-5AN	Nivalenol	NIV	312.32	[23282-20-4]	100µg/mL	acetonitrile	1	5mL
2230.15-5MG	Nivalenol hydrate	NIV	312.32	[23282-20-4]	neat		1	5mg
2230.15-10MG	Nivalenol hydrate	NIV	312.32	[23282-20-4]	neat		1	10mg
2231.20-10-AN	Ochratoxin A		403.82	[303-47-9]	10 µg/mL	acetonitrile	1	1mL
2231.20-10-5AN	Ochratoxin A		403.82	[303-47-9]	10 µg/mL	acetonitrile	1	5mL
2231.20-5MG	Ochratoxin A		403.82	[303-47-9]	neat		1	5mg
2231.20-10MG	Ochratoxin A		403.82	[303-47-9]	neat		1	10mg
3638.20-25-AN	U{13C20}-Ochratoxin A				25µg/mL	acetonitrile	1	1.2mL
3637.-2MG	Ochratoxin A -BSA Conjugate				neat		1	2mg
2232.7-100-AN	Patulin		154.12	[149-29-1]	100µg/mL	acetonitrile	1	1mL
2232.7-100-5AN	Patulin		154.12	[149-29-1]	100µg/mL	acetonitrile	1	5mL
3633.15-50-AN	T-2 Tetraol		298.33	[34114-99-3]	50µg/mL	acetonitrile	1	1mL
2241.25-100-AN	T-2 Toxin	T-2	466.58	[21259-20-1]	100 µg/mL	acetonitrile	1	1mL
2241.25-100-5AN	T-2 Toxin	T-2	466.58	[21259-20-1]	100 µg/mL	acetonitrile	1	5mL
2241.25-5MG	T-2 Toxin	T-2	466.58	[21259-20-1]	neat		1	5mg
2241.25-10MG	T-2 Toxin	T-2	466.58	[21259-20-1]	neat		1	10mg
3634.24-25-AN	U{13C24}-HT-2 Toxin				25µg/mL	acetonitrile	1	1.2mL
3631.-2MG	T-2 Toxin - BSA Conjugate				neat		1	2mg
S-4451-10-AN	MIX4 A+B-trichothecenes				10µg/mL	acetonitrile	1	1mL
S-4451-10-5AN	MIX4 A+B-trichothecenes				10µg/mL	acetonitrile	1	5mL
S-4297-100-AN	MIX2 B-trichothecene mixture				100µg/mL	acetonitrile	1	1mL
S-4297-100-5AN	MIX2 B-trichothecene mixture				100µg/mL	acetonitrile	1	5mL
3632.20-50-AN	T-2 Triol		382.45	[34114-98-2]	50µg/mL	acetonitrile	1	1mL
2250.18-10-5AN	α-Zearalenol		320.39	[36455-72-8]	10 µg/mL	acetonitrile	1	5mL
2251.18-10-5AN	β-Zearalenol		320.39	[71030-11-0]	10 µg/mL	acetonitrile	1	5mL
2796.18-1MG	β-Zearalanol		322.40	[42422-68-4]	neat		1	1mg
2252.18-10-5AN	Zearalanone		318.37	[5975-78-0]	10 µg/mL	acetonitrile	1	5mL
2238.18-100-AN	Zearalenone	ZON	318.37	[17924-92-4]	100µg/mL	acetonitrile	1	1mL
2238.18-100-5AN	Zearalenone	ZON	318.37	[17924-92-4]	100µg/mL	acetonitrile	1	5mL
2238.18-5MG	Zearalenone	ZON	318.37	[17924-92-4]	neat		1	5mg
2238.18-10MG	Zearalenone	ZON	318.37	[17924-92-4]	neat		1	10mg
3691.18-2MG	Zearalenone - BSA Conjugate				neat		1	2mg
3803-100G	Maize fluor, zearalenone				neat		1	100g

Toxic pyrrolizidine alkaloids

3914.16	Crotaline	Monocrotaline	325.36	[315-22-0]	Please inquire			
8021.16	Heliotrine		313.39	[303-33-3]	Please inquire			
8035.21	Lasiocarpine		411.50	[303-34-4]	Please inquire			
3817.18-100-ME	Retrorcine			[480-54-6]	100µg/mL	methanol	1	1mL
3818.18-100-ME	Senecionine		335.40	[130-01-8]	100µg/mL	methanol	1	1mL
3819.18-100-ME	Seneciphylline		333.38	[480-81-9]	100µg/mL	methanol	1	1mL

Ergot alkaloids

3917.32-100-ME	Ergocornine		561.7	[564-36-3]	100µg/mL	methanol	1	1mL
3765.32-100-ME	Ergocryptine		575.7	[511-09-1]	100µg/mL	methanol	1	1mL

Solanine

3865.45-2MG	Solanine		868.1	[20562-02-1]	neat		1	mL
3866.27-10MG	Solanidine		397.6	[80-78-4]	neat		1	mL

Coumarin

3867.9-K-ME	Coumarin	1,2-Benzophenone	146.14	[91-64-5]	1000µg/mL	methanol	1	1mL
3868.9-K-ME	Coumarin-d4		150.17	[185056-83-1]	1000µg/mL	methanol	1	1mL
3869.9-1ML	Cinnamaldehyde		132.16	[14371-10-9]	neat		1	mL
3870.7-1ML	Benzaldehyde		106.12	[100-52-7]	neat		1	mL
3871.10-1ML	Eugenol		164.20	[97-53-0]	neat		1	mL
3872.5-KIT	Coumarin Kit							

Food impurities and contaminants

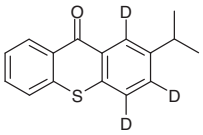
NEW

ITX, Thioxanthones

2723.16 **1,3,4-d3-2-Isopropylthioxanthone**

ITX

MW 257.37



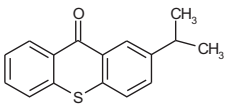
2723.16-100-IO 100µg/mL isooctane, 1x1mL

2723.16-10MG neat, 1x10mg

2722.16 **2-Isopropylthioxanthone**

ITX

[5495-84-1] MW 254.35



2722.16-K-IO 1000µg/mL isooctane, 1x1mL

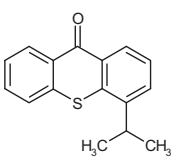
2722.16-10MG neat, 1x10mg

2722.16-100MG neat, 1x100mg

2726.16 **4-Isopropylthioxanthone**

ITX

[83846-86-0] MW 254.35

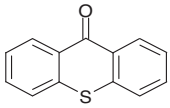


2726.16-K-IO 1000µg/mL isooctane, 1x1mL

2726.16-10MG neat, 1x10mg

3583.13 **Thioxanthone**

[492-22-8] MW 212.27



3583.13-K-IO 1000µg/mL isooctane, 1x1mL

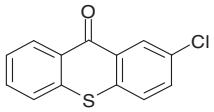
3586.10 **6-Methylthiochroman-4-one**

[6948-34-1] MW 178.25

3586.10-K-IO 1000µg/mL isooctane, 1x1mL

3587.13 **2-Chlorothioxanthone**

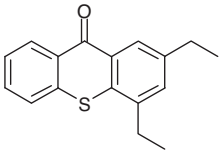
[86-39-5] MW 246.71



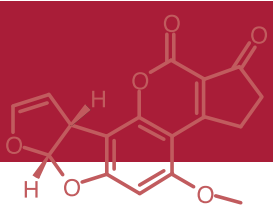
3587.13-K-IO 1000µg/mL isooctane, 1x1mL

3584.17 **2,4-Diethylthioxanthone**

[82799-44-8] MW 268.37

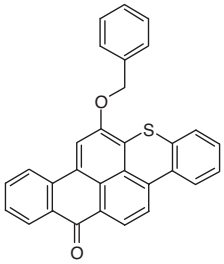


3584.17-K-IO 1000µg/mL isooctane, 1x1mL



3585.30 **Thioxanthone 64**

[869857-32-9] MW 442.53



3585.30-10MG neat, 1x10mg

Other food related impurities and contaminates

3873.3-K-ME	3-Chloro-1,2-propandiol	110.54	[96-24-2]	1000µg/mL	methanol	1	1mL
3874.3-K-ME	3-Chloro-1,2-propane-d5-diol	115.57	[342611-01-2]	1000µg/mL	methanol	1	1mL
3875.3-1G	Acylamide	71.08	[79-06-1]	neat		1	1g
3876.3-100-ME	Acrylamide-d3	74.10	[122775-19-3]	100µg/mL	methanol	1	1mL
8103.3-100-ME	Acrylamide-1-13C	72.09	[287399-24-0]	100µg/mL	methanol	1	1mL
3877.4-1G	Furan	68.08	[110-00-9]	neat		1	1g
3878.4-100-ME	Furan-d4	72.11	[6142-90-1]	100µg/mL	methanol	1	1mL
3879.8-K-ME	2-Ethylhexanoic acid	144.22	[149-57-5]	1000µg/mL	methanol	1	1mL
3880.8-K-ME	2-Ethylhexanoic acid-d15	159.30	[352431-38-1]	1000µg/mL	methanol	1	1mL
3881.7-1G	2-Nitrobenzaldehyde	151.12	[552-89-6]	neat		1	1g
3882.1-100MG	Semicarbazide HCl	75.07	[563-41-7]	neat		1	100mg
3883.2.100MG	Azodicarbonamide	116.03	[123-77-3]	neat		1	100mg
3884-100MG	Nitrofurazone (5-Nitro-2-furfurylidene semicarbazone)	198.14	[59-87-0]	neat		1	100mg
3885.3-100MG	Ethyl carbamate	89.09	[51-79-6]	neat		1	100mg

Algae and shellfish toxins

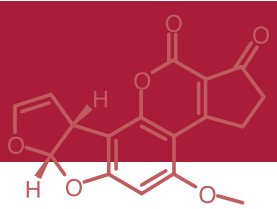
NEW

Amnesic shellfish (ASP) toxins

3692.15-100-02MX	Domoic acid	CRM-DA-e	311.33	[14277-97-5]	99.4µM	AN/water	1	0.2mL
3693.15-100-8G	Myticus edulis, homogenized (Domoic acid)	CRM-ASP-Mus-c			99.4µg/g	hom. Mussel	1	8g
3694-100-15G	Myticus edulis, homogenized (Domoic acid)	RM-ASP-Mus			98µg/g	hom. Mussel	1	15g

Diarrhetic shellfish (DSP) and lipophilic toxins

3695.44-30-05ME	Okadaic acid	CRM-OA-b	805.01	[78111-17-8]	30µM	methanol	1	0.5mL
3696.44-4G	Blue mussel, homogenized (Okadaic acid)	CRM-DSP-Mus-b	805.00	[78111-17-8]	10.1µg/g	hom. blend	1	4g
3697.45-100UG	Dinophysis toxin 1			[81720-10-7]	100µg	neat	1	neat
3698-10-05ME	Pectenotoxin	CRM-PTX2		[119166-88-0]	10.0µM	methanol	1	0.5mL
	Pectenotoxin-2 seco acid	CRM-PTX2sa	877.07	[212502-87-9]				
3700.42-10-05ME	13-Desmethyl Spirolide C	CRM-SPX1	691.94	[334974-07-1]	10.2µM	methanol	1	0.5mL
3701.32-10-05ME	Gymnodimine	CRM-GYM	507.70	[173792-58-0]	9.9µM	methanol	1	0.5mL
3702.55—05ME	Yessotoxin	CRM-YTX	1143.36	[112514-54-2]	4.6µM	methanol	1	0.5mL
8102.X-1-05ME	Azaspirazide1	CRM-AZA1				methanol	1	0.5mL



Paralytic shellfish (PSP) toxins

3703.10-60-05HC	Saxitoxin dihydrochloride	CRM-STX-e		[35554-08-6]	65µM	10-3M HCl	1	0.5mL
3704.10-60-05HC	Neosaxitoxin	CRM-NEO-b	315.29	[64296-20-4]	65µM	10-3M HCl	1	0.5mL
3705.-60-05HC	Descarbamoylsaxitoxin	CRM-dcSTX			62µM	10-3M HCl	1	0.5mL
3706.10—05HC	Gonyautoxin-1 and -4	CRM-GTX1&4-b	411.35	[60748-39-2]/ [64296-26-0]	106+35µM	HCl/AcOH(Aq)	1	0.5mL
3707.10—05HC	Gonyautoxin-2 and -3	CRM-GTX2&3-b	411.35	[60508-89-6]/ [60537-65-7]	118+39µM	HCl/AcOH(Aq)	1	0.5mL
3708.10-60-05HC	Gonyautoxin-5 (akaB1)	CRM-GTX5-b		[64296-25-9]	65µM	HCl pH5 (aq)	1	0.5mL
3709.—05HC	Descarbamoylgonyautoxin-2 and -3	CRM-dcGTX2&3			114+32µM	HCl/AcOH(Aq)	1	0.5mL
3710-30-05W	Descarbamoylneosaxitoxin	CRM-dcNEO			30µM	water	1	0.5mL
3711.10—05HC	N-Sulfocarbamoyl-gonyautoxin-2 and -3	CRM-C1&2	475.41	[80173-30-4]/ [80226-62-6]	114+35µM	HCl pH5 (aq)	1	0.5mL

Freshwater and cyanobacterial toxins

3712.15-30-05W	Cylindrospermopsin	CRM-CYN	415.42	[143545-90-8]	30µM	water	1	0.5mL
2552.10-1MG	Anatoxin A		165.24	[64285-06-9]	neat		1	1mg

Aroma chemicals

NEW

Off-favour compounds

3886.8-100-ME	Skatole	131.18	[83-34-1]	100µg/mL	methanol	1mL
3887.11-100-ME	2-Methylkisoboreneol	168.28	[237-42-8]	100µg/mL	methanol	1mL
3888.12-100-ME	(+/-)-Geosmine	182.31	[16423-19-1]	100µg/mL	methanol	1mL
3889.7-100-ME	2,4,6-Trichloroanisole	211.48	[87-40-1]	100µg/mL	methanol	1mL
3890.4-100-ME	Methional	104.17	[3268-49-3]	100µg/mL	methanol	1mL
3094.15-100-ME	2,5-Dibromobiphenyl	218.34	[4674-50-4]	100µg/mL	methanol	1mL
3892.10-100-ME	Carvone	150.22	[99-49-0]	100µg/mL	methanol	1mL
3893.5-100-ME	3-Methyl-2-buten-1-thiol	102.19	[5287-45-6]	100µg/mL	methanol	1mL

Thiazoles

3894.5-100-ME	2-Acetylthiazole	127.18	[24295-03-2]	100µg/mL	methanol	1mL
3895.5-100-ME	2-Acetyl-2-thiazoline	129.18	[29926-41-8]	100µg/mL	methanol	1mL
3896.7-100-ME	Benzothiazole	135.18	[95-16-9]	100µg/mL	methanol	1mL
3897.10-100-ME	2-Isobutylthiazole	141.23	[18640-24-9]	100µg/mL	methanol	1mL

Pyrazines

3770.9-K-IO	2-sec-Butyl-3-methoxypyrazine	166.22	[24168-70-5]	1000µg/mL	isooctane	1mL
3771.6-K-IO	2,3-Dimethylpyrazine	108.15	[5910-89-4]	1000µg/mL	isooctane	1mL
3772.6-K-IO	2,5-Dimethylpyrazine	108.15	[123-32-0]	1000µg/mL	isooctane	1mL
3773.6-K-IO	2,6-Dimethylpyrazine	108.15	[108-50-9]	1000µg/mL	isooctane	1mL
3774.8-K-IO	2-Ethyl-3,5-dimethylpyrazine	136.19	[13925-07-0]	1000µg/mL	isooctane	1mL
3775.8-K-IO	2-Ethyl-3,6-dimethylpyrazine	136.90	[13360-65-1]	1000µg/mL	isooctane	1mL
3776.7-K-IO	2-Ethyl-3-methoxypyrazine	138.17	[25680-58-4]	1000µg/mL	isooctane	1mL
3777.7-K-IO	2-Ethyl-3-methylpyrazine	122.17	[15707-23-0]	1000µg/mL	isooctane	1mL
3778.7-K-IO	2-Ethyl-5-methylpyrazine	122.70	[13360-64-0]	1000µg/mL	isooctane	1mL
3779.6-K-IO	2-Ethylpyrazine	108.14	[13925-00-3]	1000µg/mL	isooctane	1mL
3780.9-K-IO	2-Isobutyl-3-methoxypyrazine	166.22	[24683-00-9]	1000µg/mL	isooctane	1mL
3781.9-K-IO	2-Isobutyl-3-methylpyrazine	150.22	[13925-06-9]	1000µg/mL	isooctane	1mL
3782.8-K-IO	2-Methoxy-3-isopropylpyrazine	152.20	[25773-40-4]	1000µg/mL	isooctane	1mL
3783.6-K-IO	2-Methoxy-3-methylpyrazine	124.14	[2847-30-5]	1000µg/mL	isooctane	1mL
3784.5-K-IO	2-Methoxypyrazine	110.11	[3149-28-8]	1000µg/mL	isooctane	1mL
3785.5-K-IO	2-Methylpyrazine	94.12	[109-08-0]	1000µg/mL	isooctane	1mL
3787.7-K-IO	2,3,5-Trimethylpyrazine	122.17	[14667-55-1]	1000µg/mL	isooctane	1mL
3786.8-K-IO	2,3,5,6-Tetramethylpyrazine	136.20	[1124-11-4]			

Phenols

1358.7-1G	p-Cresol		108.14	[106-44-5]	neat		1g
1411.8-1G	4-Ethylphenol		122.17	[123-07-9]	neat		1g
2372.7-K-IO	Guaiacol		124.14	[90-05-1]	1000µg/mL	isooctane	1mL
3898.8-K-MX	4-Vinylphenol		120.15	[2628-17-3]	10 %	propylene glycol	1mL
3899.8-K-IO	2-Methoxy-4-vinylphenol		150.18	[7786-61-0]	1000µg/mL	isooctane	1mL
3900.8-1ML	Eugenol		164.20	[97-52-7]	neat		1mL
2370.8-K-IO	Vanillin		152.15	[121-33-5]	1000µg/mL	isooctane	1mL

Food colors: See the Food safety section

Fatty acids and derivatives

NEW

Saturated fatty acids

3128.3-K-IO	Trianoic acid (Propionic)	C3:0	74.08	[79-09-4]	1000µg/mL	isooctane	1	1mL
3129.4-K-IO	Tetranoic acid (Butyric)	C4:0	88.11	[107-92-6]	1000µg/mL	isooctane	1	1mL
3130.5-K-IO	Pentanoic acid (Valeric)	C5:0	102.13	[109-52-4]	1000µg/mL	isooctane	1	1mL
3131.6-K-IO	Hexanoic acid (Caproic)	C6:0	116.16	[142-62-1]	1000µg/mL	isooctane	1	1mL
3132.7-K-IO	Heptanoic acid (Enantic)	C7:0	130.19	[111-14-8]	1000µg/mL	isooctane	1	1mL
3133.8-K-IO	Octanoic acid (Caprylic)	C8:0	144.21	[124-07-2]	1000µg/mL	isooctane	1	1mL
3134.9-K-IO	Nonanoic acid (Pelargonic)	C9:0	158.24	[112-05-0]	1000µg/mL	isooctane	1	1mL
3135.10-K-IO	Decanoic acid (Capric)	C10:0	172.27	[334-48-5]	1000µg/mL	isooctane	1	1mL
3136.11-K-IO	Undecanoic acid (Hendecanoic)	C11:0	186.30	[112-37-8]	1000µg/mL	isooctane	1	1mL
3137.12-K-IO	Dodecanoic acid (Lauric)	C12:0	200.35	[143-07-7]	1000µg/mL	isooctane	1	1mL
3138.13-K-IO	Tridecanoic acid	C13:0	214.35	[638-53-9]	1000µg/mL	isooctane	1	1mL
3139.14-K-IO	Tetradecanoic acid (Myristic)	C14:0	228.38	[544-63-8]	1000µg/mL	isooctane	1	1mL
3140.15-K-IO	Pentadecanoic acid	C15:0	242.41	[1002-84-2]	1000µg/mL	isooctane	1	1mL
3141.16-K-IO	Hexadecanoic acid (Palmitic)	C16:0	256.43	[57-10-3]	1000µg/mL	isooctane	1	1mL
3142.17-K-IO	Heptadecanoic acid (Margaric)	C17:0	270.48	[506-12-7]	1000µg/mL	isooctane	1	1mL
3143.18-K-IO	Octadecanoic acid (Stearic)	C18:0	284.48	[57-11-4]	1000µg/mL	isooctane	1	1mL
3144.19-K-IO	Nonadecanoic acid	C19:0	298.51	[646-30-0]	1000µg/mL	isooctane	1	1mL
3145.18-K-IO	12-Hydroxystearic acid	C18:0	300.48	[106-14-9]	1000µg/mL	isooctane	1	1mL
3146.20-K-IO	Eicosanoic acid (Arachidic)	C20:0	312.54	[506-30-9]	1000µg/mL	isooctane	1	1mL
3147.21-K-IO	Heneicosanoic acid	C21:0	326.57	[2363-71-5]	1000µg/mL	isooctane	1	1mL
3148.22-K-IO	Docosanoic acid (Behenic)	C22:0	340.59	[112-85-6]	1000µg/mL	isooctane	1	1mL
3149.23-K-IO	Tricosanoic acid	C23:0	354.61	[2433-96-7]	1000µg/mL	isooctane	1	1mL
3150.24-K-IO	Tetracosanoic acid (Lignoceric)	C24:0	368.64	[557-59-5]	1000µg/mL	isooctane	1	1mL

Saturated fatty acids methyl esters

Deuterated

3715.3-K-HX	Methyl hexadecanoate-d31 (Methyl palmitate)		295.60	[29848-79-1]	1000µg/mL	n-hexane	5	1mL
2898.17-K-HX	Methyl hexadecanoate-d31 (Methyl palmitate-d31)		301.65	[29848-79-1]	1000µg/mL	n-hexane	5	1mL
2897.19-K-HX	Methyl octadecanoate-d35		333.72	[29823-25-4]	1000µg/mL	n-hexane	5	1mL

Native FAMEs

3151.4-K-IO	Methyl trianoate (Methyl propionate)	C3:0	88.11	[554-12-1]	1000µg/mL	isooctane	1	1mL
3152.5-K-IO	Methyl tetranoate (Methyl butyrate)	C4:0	102.13	[623-42-7]	1000µg/mL	isooctane	1	1mL
3640.5-K-IO	Methyl isobutyrate		102.13	[547-63-7]	1000µg/mL	isooctane	1	1mL
3153.6-K-IO	Methyl pentanoate (Methyl valerate)	C5:0	116.16	[624-24-8]	1000µg/mL	isooctane	1	1mL
3154.7-K-IO	Methyl hexanoate (Methyl caproate)	C6:0	130.18	[106-70-7]	1000µg/mL	isooctane	1	1mL
3155.8-K-IO	Methyl heptanoate (Methyl enantate)	C7:0	144.21	[106-73-0]	1000µg/mL	isooctane	1	1mL
3156.9-K-IO	Methyl octanoate (Methyl caprylate)	C8:0	158.21	[111-11-5]	1000µg/mL	isooctane	1	1mL
3157.10-K-IO	Methyl nonanoate (Methyl pelargonate)	C9:0	172.26	[1731-84-6]	1000µg/mL	isooctane	1	1mL
3158.11-K-IO	Methyl decanoate (Methyl caprate)	C10:0	186.30	[110-42-9]	1000µg/mL	isooctane	1	1mL
3159.12-K-IO	Methyl undecanoate (Methyl hendecanoate)	C11:0	200.32	[1731-86-8]	1000µg/mL	isooctane	1	1mL
3160.13-K-IO	Methyl dodecanoate (Methyl laurate)	C12:0	214.36	[111-82-0]	1000µg/mL	isooctane	1	1mL

3161.14-K-IO	Methyl tridecanoate	C13:0	228.37	[1731-88-0]	1000µg/mL	isooctane	1	1mL
3162.15-K-IO	Methyl tetradecanoate (Methyl myrististate)	C14:0	242.40	[124-10-7]	1000µg/mL	isooctane	1	1mL
3163.16-K-IO	Methyl pentadecanoate	C15:0	256.42	[7132-64-1]	1000µg/mL	isooctane	1	1mL
3164.17-K-IO	Methyl hexadecanoate (Methyl palmitate)	C16:0	270.45	[112-39-0]	1000µg/mL	isooctane	1	1mL
3165.18-K-IO	Methyl heptadecanoate	C17:0	284.48	[1731-92-6]	1000µg/mL	isooctane	1	1mL
1398.19-K-IO	Methyl octadecanoate (Methyl stearate)	C18:0	298.50	[112-61-8]	1000µg/mL	isooctane	1	1mL
3168.19-K-IO	Methyl 12-hydroxystearate	C18:0	314.00	[141-23-1]	1000µg/mL	isooctane	1	1mL
3167.20-K-IO	Methyl nonadecanoate	C19:0	312.53	[1731-94-8]	1000µg/mL	isooctane	1	1mL
3169.21-K-IO	Methyl eicosanoate (Methyl arachidate)	C20:0	326.56	[1120-28-1]	1000µg/mL	isooctane	1	1mL
3170.22-K-IO	Methyl heneicosanoate	C21:0	340.59	[6064-90-0]	1000µg/mL	isooctane	1	1mL
3171.23-K-IO	Methyl docosanoate (Methyl behenate)	C22:0	354.61	[929-77-1]	1000µg/mL	isooctane	1	1mL
3172.24-K-IO	Methyl tricosanoate	C23:0	368.64	[2433-97-8]	1000µg/mL	isooctane	1	1mL
3173.25-K-IO	Methyl tetracosanoate (Methyl lignocerate)	C24:0	382.67	[2442-49-1]	1000µg/mL	isooctane	1	1mL

Saturated fatty acids ethyl esters

3174.5-K-IO	Ethyl propanoate	C3:0,Ethyl trianoate	102.40	[104-37-3]	1000µg/mL	isooctane	1	1mL
3175.6-K-IO	Ethyl butanoate	C4:0,Ethyl tetranoate	116.16	[105-54-4]	1000µg/mL	isooctane	1	1mL
3176.7-K-IO	Ethyl pentanoate	C5:0	130.18	[539-82-2]	1000µg/mL	isooctane	1	1mL
3177.8-K-IO	Ethyl hexanoate	C6:0	144.12	[123-66-0]	1000µg/mL	isooctane	1	1mL
3178.9-K-IO	Ethyl heptanoate	C7:0	158.24	[106-30-9]	1000µg/mL	isooctane	1	1mL
3179.10-K-IO	Ethyl octanoate	C8:0	172.27	[106-32-1]	1000µg/mL	isooctane	1	1mL
3180.11-K-IO	Ethyl nonanoate	C9:0	186.30	[123-29-5]	1000µg/mL	isooctane	1	1mL
3181.12-K-IO	Ethyl decanoate	C10:0	200.35	[110-38-3]	1000µg/mL	isooctane	1	1mL
3182.13-K-IO	Ethyl undecanoate	C11:0	214.35	[627-90-7]	1000µg/mL	isooctane	1	1mL
3183.14-K-IO	Ethyl dodecanoate	C12:0	228.37	[106-33-2]	1000µg/mL	isooctane	1	1mL
3184.15-K-IO	Ethyl tridecanoate	C13:0	242.40	[28267-29-0]	1000µg/mL	isooctane	1	1mL
3185.16-K-IO	Ethyl tetradecanoate	C14:0	256.42	[124-06-1]	1000µg/mL	isooctane	1	1mL
3186.17-K-IO	Ethyl pentadecanoate	C15:0	270.45	[41114-00-5]	1000µg/mL	isooctane	1	1mL
3187.18-K-IO	Ethyl hexadecanoate	C16:0	284.48	[628-97-7]	1000µg/mL	isooctane	1	1mL
3188.19-K-IO	Ethyl heptadecanoate	C17:0	298.50	[14010-23-2]	1000µg/mL	isooctane	1	1mL
3189.20-K-IO	Ethyl octadecanoate	C18:0	312.53	[111-61-5]	1000µg/mL	isooctane	1	1mL
3191.20-K-IO	Ethyl 12-hydroxystearate	C18:0	328.53	[82807-36-1]	1000µg/mL	isooctane	1	1mL
3190.21-K-IO	Ethyl nonadecanoate	C19:0	326.56	[18281-04-4]	1000µg/mL	isooctane	1	1mL
3192.22-K-IO	Ethyl eicosanoate	C20:0	340.58	[18281-05-5]	1000µg/mL	isooctane	1	1mL
3193.23-K-IO	Ethyl heneicosanoate	C21:0	354.61	[28898-67-1]	1000µg/mL	isooctane	1	1mL
3194.24-K-IO	Ethyl docosanoate	C22:0	368.64	[5908-87-2]	1000µg/mL	isooctane	1	1mL
3195.25-K-IO	Ethyl tricosanoate	C23:0	382.66	[18281-07-7]	1000µg/mL	isooctane	1	1mL
3196.26-K-IO	Ethyl tetracosanoate	C24:0	396.69	[24634-95-5]	1000µg/mL	isooctane	1	1mL

Unsaturated fatty acids

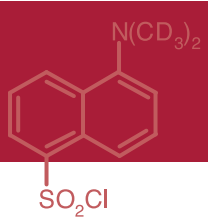
3197.11-K-IO	10-Undecenoic acid	C11:1,Hendecenoic	184.30	[112-38-9]	1000µg/mL	isooctane	1	1mL
3198.12-K-IO	11-Dodecenoic acid	C12:1	198.35	[65423-25-8]	1000µg/mL	isooctane	1	1mL
3199.13-K-IO	12-Tridecenoic acid	C13:1	212.35	[6006-06-0]	1000µg/mL	isooctane	1	1mL
3200.14-K-IO	9-Tetradecenoic acid	C14:1,Myristoleic	226.38	[544-64-9]	1000µg/mL	isooctane	1	1mL
3201.14-K-IO	9-trans-Tetradecenoic acid	C14:1T,Myristelaidic	226.38	[50286-30-1]	1000µg/mL	isooctane	1	1mL
3202.15-K-IO	10-Pentadecenoic acid	C15:1	240.40	[84743-29-3]	1000µg/mL	isooctane	1	1mL
3203.15-K-IO	10-trans-Pentadecenoic acid	C15:1T	240.40	[321744-58-5]	1000µg/mL	isooctane	1	1mL
3204.15-K-IO	14-Pentadecenoic acid	C15:1	240.40	[17351-34-7]	1000µg/mL	isooctane	1	1mL
3206.16-K-IO	9-Hexadecenoic acid	C16:1,Palmitoleic	254.43	[373-49-9]	1000µg/mL	isooctane	1	1mL
3205.16-K-IO	9-trans-Hexadecenoic acid	C16:1T,Palmitelaidic	254.43	[10030-73-6]	1000µg/mL	isooctane	1	1mL
3207.17-K-IO	10-Heptadecenoic acid	C17:1	268.48	[29743-97-3]	1000µg/mL	isooctane	1	1mL
3208.17-K-IO	10-trans-Heptadecenoic acid	C17:1T	268.48	[126761-43-1]	1000µg/mL	isooctane	1	1mL
3215.18-K-IO	6-Octadecenoic acid	C18:1,Petroselenic	282.48	[593-39-5]	1000µg/mL	isooctane	1	1mL
3216.18-K-IO	6-trans-Octadecenoic acid	C18:1T,Petroselaidic	282.48	[593-40-8]	1000µg/mL	isooctane	1	1mL
3217.18-K-IO	9-Octadecenoic acid	C18:1,Oleic	282.48	[112-80-1]	1000µg/mL	isooctane	1	1mL

3218.18-K-IO	9-trans-Octadecenoic acid	C18:1T,Eleaidic	282.48	[112-79-8]	1000µg/mL	isooctane	1	1mL
3213.18-K-IO	11-Octadecenoic acid	C18:1,Vaccenic	282.48	[506-17-2]	1000µg/mL	isooctane	1	1mL
3214.18-K-IO	11-trans-Octadecenoic acid	C18:1T,Transvaccenic	282.48	[693-72-1]	1000µg/mL	isooctane	1	1mL
3211.18-K-IO	9,12-Octadecadienoic acid	C18:2,Linoleic	280.48	[60-33-3]	1000µg/mL	isooctane	1	1mL
3212.18-K-IO	9-trans-12-trans-Octadecadienoic acid	C18:2TT,Linoelaidic	280.48	[506-21-8]	1000µg/mL	isooctane	1	1mL
3250.18-K-IO	9-cis-12-trans-Octadecadienoic acid	C18:2,Conjugated	280.45	[2540-56-9]	1000µg/mL	isooctane	1	1mL
3249.18-K-IO	10-trans-Octadecadienoic acid	C18:2,Conjugated	280.45	[2420-56-6]	1000µg/mL	isooctane	1	1mL
3251.18-K-IO	Octadecadienoic acid (9,11 + 10,12 c+tr) (Conjugated)	C18:2,Conjugated	280.45		1000µg/mL	isooctane	1	1mL
3209.18-K-IO	6,9,12-Octadecatrienoic acid	C18:3,Gamma Linolenic	278.48	[506-26-3]	1000µg/mL	isooctane	1	1mL
3210.18-K-IO	9,12,15-Octadecatrienoic acid	C18:3,Linolenic	278.48	[463-40-1]	1000µg/mL	isooctane	1	1mL
3224.18-K-IO	12-Hydroxyoctadecenoic acid	C18:1,Ricinoleic	298.46	[450-12-5]	1000µg/mL	isooctane	1	1mL
3225.18-K-IO	12-Hydroxyoctadecenoic acid	C18:1T,Ricinelaidic	298.46	[540-12-5]	1000µg/mL	isooctane	1	1mL
3222.19-K-IO	7-Nonadecenoic acid	C19:1	296.48	[118020-79-4]	1000µg/mL	isooctane	1	1mL
3223.19-K-IO	7-trans-Nonadecenoic acid	C19:1T	296.48	[191544-99-7]	1000µg/mL	isooctane	1	1mL
3221.19-K-IO	10-trans-Nonadecenoic acid	C19:1T	296.48	[147527-21-7]	1000µg/mL	isooctane	1	1mL
3220.19-K-IO	10-Nonadecenoic acid	C19:1	296.48	[73033-09-7]	1000µg/mL	isooctane	1	1mL
3219.19-K-IO	10,13-Nonadecadienoic acid	C19:2	294.48	[29204-20-4]	1000µg/mL	isooctane	1	1mL
3234.20-K-IO	5-Eicosenoic acid	C20:1	310.54	[7050-07-9]	1000µg/mL	isooctane	1	1mL
3235.20-K-IO	8-Eicosenoic acid	C20:1	310.54	[76261-96-6]	1000µg/mL	isooctane	1	1mL
3232.20-K-IO	11-Eicosenoic acid	C20:1,Gadolenic	310.54	[5561-99-9]	1000µg/mL	isooctane	1	1mL
3233.20-K-IO	11-trans-Eicosenoic acid	C20:1T	310.54	[62322-84-3]	1000µg/mL	isooctane	1	1mL
3231.20-K-IO	11,14-Eicosadienoic acid	C20:2	308.53	[5598-38-9]	1000µg/mL	isooctane	1	1mL
3230.20-K-IO	8,11,14-Eicosatrienoic acid	C20:3,Homogamma Linolenic	306.53	[1783-84-2]	1000µg/mL	isooctane	1	1mL
3229.20-K-IO	11,14,17-Eicosatrienoic acid	C20:3	306.53	[17046-59-2]	1000µg/mL	isooctane	1	1mL
3227.20-K-IO	Arachidonic acid	C20:4,Eicosatetraenoic acid	304.52	[506-32-1]	1000µg/mL	isooctane	1	1mL
3226.20-K-IO	Eicosapentaenoic acid	C20:5 EPA	302.52	[1047-94-4]	1000µg/mL	isooctane	1	1mL
3237.21-K-IO	12-Heneicosenoic acid	C21:1	324.57	[3515-84-2]	1000µg/mL	isooctane	1	1mL
3236.21-K-IO	12,15-Heneicosadienoic acid	C21:2	322.57	[191545-08-1]	1000µg/mL	isooctane	1	1mL
3243.22-K-IO	13-Docosenoic acid	C22:1,Erucic	338.59	[112-86-7]	1000µg/mL	isooctane	1	1mL
3244.22-K-IO	13-trans-Docosenoic acid	C22:1T,Brassidic	338.59	[506-33-2]	1000µg/mL	isooctane	1	1mL
3242.22-K-IO	13,16-Docosadienoic acid	C22:2	336.59	[17735-98-7]	1000µg/mL	isooctane	1	1mL
3241.22-K-IO	13,16,19-Docosatrienoic acid	C22:3	334.58	[28845-86-5]	1000µg/mL	isooctane	1	1mL
3240.22-K-IO	7,10,13,16-Docosatetraenoic acid	C22:4	332.57	[28874-58-0]	1000µg/mL	isooctane	1	1mL
3247.22-K-IO	4,7,10,13,16-Docosapentaenoic acid	C22:5	330.50	[2313-14-6]	1000µg/mL	isooctane	1	1mL
3239.22-K-IO	Docosapentaenoic acid	C22:5 DPA	330.57		1000µg/mL	isooctane	1	1mL
3238.22-K-IO	Docosahexaenoic acid	C22:6 DHA	328.57	[6217-54-5]	1000µg/mL	isooctane	1	1mL
3245.23-K-IO	14-Tricosenoic acid	C23:1	352.60	[105305-00-8]	1000µg/mL	isooctane	1	1mL
3246.24-K-IO	15-Tetracosenoic acid	C24:1,Nervonic	366.63	[506-37-6]	1000µg/mL	isooctane	1	1mL

Unsaturated fatty esters

3641.12-K-IO	Ethyl 4-trans-decenoate	C10:4C	198.30	[76649-16-6]	1000µg/mL	isooctane	1	1mL
3253.12-K-IO	Methyl 10-undecenoate	C11:1,Hendecenoic	198.30	[111-81-9]	1000µg/mL	isooctane	1	1mL
3254.13-K-IO	Methyl 11-dodecenoate	C12:1	212.33	[29972-79-0]	1000µg/mL	isooctane	1	1mL
3255.14-K-IO	Methyl 12-tridecenoate	C13:1	226.38	[29780-00-5]	1000µg/mL	isooctane	1	1mL
3256.15-K-IO	Methyl 9-tetradecenoate	C14:1,Myristoleic	240.40	[56219-06-8]	1000µg/mL	isooctane	1	1mL
3257.15-K-IO	Methyl 9-trans-tetradecenoate	C14:T,Myristoleic	240.40	[72025-18-4]	1000µg/mL	isooctane	1	1mL
3258.16-K-IO	Methyl 10-pentadecenoate	C15:1	254.43	[90176-52-6]	1000µg/mL	isooctane	1	1mL
3259.16-K-IO	Methyl 10-trans-pentadecenoate	C15:1T	254.43	[90176-51-5]	1000µg/mL	isooctane	1	1mL
3260.16-K-IO	Methyl 14-pentadecenoate	C15:1	254.43	[91400-78-1]	1000µg/mL	isooctane	1	1mL
3262.17-K-IO	Methyl 9-hexadecenoate	C16:1,Palmitoleic	268.43	[1120-25-8]	1000µg/mL	isooctane	1	1mL
3261.17-K-IO	Methyl 9-trans-hexadecenoate	C16:1T,Palmiteladic	268.43	[10030-74-7]	1000µg/mL	isooctane	1	1mL
3263.18-K-IO	Methyl 10-heptadecenoate	C17:1	282.46	[75190-82-8]	1000µg/mL	isooctane	1	1mL
3264.18-K-IO	Methyl 10-trans-heptadecenoate	C17:1T	282.46	[369657-02-3]	1000µg/mL	isooctane	1	1mL

3271.19-K-IO	Methyl octadecenoate	C18:1 Petroselinic	296.48	[2777-58-4]	1000µg/mL	isooctane	1	1mL
3272.19-K-IO	Methyl 6-trans-octadecenoate	C18:1T, Petroselaiolic	296.48	[14620-36-1]	1000µg/mL	isooctane	1	1mL
3274.19-K-IO	Methyl 9-trans-octadecenoate	C18:1T	296.49	[1937-62-8]	1000µg/mL	isooctane	1	1mL
3273.19-K-IO	Methyl octadecenoate	C18:1,Oleic	296.48	[112-62-9]	1000µg/mL	isooctane	1	1mL
3269.19-K-IO	Methyl octadecenoate	C18:1,Vaccenic	296.49	[1937-63-9]	1000µg/mL	isooctane	1	1mL
3270.19-K-IO	Methyl 11-trans-octadecenoate	C18:1T,Transvaccenic	296.48	[6198-58-9]	1000µg/mL	isooctane	1	1mL
3280.19-K-IO	Methyl 12- hydroxy-9-octadecenoate	C18:1,Ricinoleic	312.49	[141-24-2]	1000µg/mL	isooctane	1	1mL
3281.19-K-IO	Methyl 12-hydroxy-9-trans-octadecenoate	C18:1T,Ricinelaidic	312.49	[7706-01-6]	1000µg/mL	isooctane	1	1mL
3307.19-K-IO	Methyl octadecadienoate (9,11 + 10,12 c+tr)	C18:2,Conjugated	294.47		1000µg/mL	isooctane	1	1mL
3305.19-K-IO	Methyl octadecadienoate (9c,11tr)	C18:2,Conjugated	294.47	[13058-52-1]	1000µg/mL	isooctane	1	1mL
3306.19-K-IO	Methyl octadecadienoate (10tr,12c)	C18:2,Conjugated	294.47	[21870-97-3]	1000µg/mL	isooctane	1	1mL
3268.19-K-IO	Methyl octadecadienoate (9c,12c)	C18:2,Linoleic	294.48	[112-63-0]	1000µg/mL	isooctane	1	1mL
3265.19-K-IO	Methyl octadecatrienoate (6c, 9c, 12c)	C18:3,Gamma Linolenic	292.46	[16326-32-2]	1000µg/mL	isooctane	1	1mL
3266.19-K-IO	Methyl octadecatrienoate (9c, 12c, 15c)	C18:3,Linolenic	292.46	[301-00-8]	1000µg/mL	isooctane	1	1mL
3267.19-K-IO	Methyl octadecadienoate (9tr,12tr)	C18:2TT,Linoelaidic	294.48	[2566-97-4]	1000µg/mL	isooctane	1	1mL
3278.20-K-IO	Methyl 7-nonadecenoate	C19:1	310.51	[146407-37-6]	1000µg/mL	isooctane	1	1mL
3279.20-K-IO	Methyl 7-trans-nonadecenoate	C19:1T	310.51		1000µg/mL	isooctane	1	1mL
3276.20-K-IO	Methyl 10-nonadecenoate	C19:1	310.51	[19788-74-0]	1000µg/mL	isooctane	1	1mL
3277.20-K-IO	Methyl 10-trans-nonadecenoate	C19:1T	310.51	[84675-68-3]	1000µg/mL	isooctane	1	1mL
3275.20-K-IO	Methyl 10,13-nonadecadienoate	C19:2	308.50	[29204-30-6]	1000µg/mL	isooctane	1	1mL
3290.21-K-IO	Methyl 5-eicosenoate	C20:1	324.54	[20839-34-3]	1000µg/mL	isooctane	1	1mL
3291.21-K-IO	Methyl 8-eicosenoate	C20:1	324.54	[69119-99-9]	1000µg/mL	isooctane	1	1mL
3288.21-K-IO	Methyl 11-eicosenoate	C20:1	324.54	[2390-09-2]	1000µg/mL	isooctane	1	1mL
3289.21-K-IO	Methyl 11-trans-eicosenoate	C20:1T	324.54	[69119-90-0]	1000µg/mL	isooctane	1	1mL
3287.21-K-IO	Methyl 11,14-eicosadienoate	C20:2	322.53	[61012-46-2]	1000µg/mL	isooctane	1	1mL
3285.21-K-IO	Methyl 8,11,14-eicosatrienoate	C20:3,Homogamma Linolenic	320.51	[21061-10-9]	1000µg/mL	isooctane	1	1mL
3286.21-K-IO	Methyl 11,14,17-eicosatrienoate	C20:3	320.51	[62472-96-2]	1000µg/mL	isooctane	1	1mL
3283.21-K-IO	Methyl arachidonoate	C20:4	318.49	[2566-89-4]	1000µg/mL	isooctane	1	1mL
3282.21-K-IO	Methyl 5,8,11,14,17-eicosapentaenoate	C20:5 EPA	316.48	[2734-47-6]	1000µg/mL	isooctane	1	1mL
3293.22-K-IO	Methyl 12-heneicosenoate	C21:1	338.57	[146407-38-7]	1000µg/mL	isooctane	1	1mL
3292.22-K-IO	Methyl 12,15-heneicosadienoate	C21:2	336.55	[122768-03-0]	1000µg/mL	isooctane	1	1mL
3299.23-K-IO	Methyl 13-docosenoate	C22:1,Erucic	352.59	[1120-34-9]	1000µg/mL	isooctane	1	1mL
3300.23-K-IO	Methyl 13-trans-docosenoate	C22:1T,Brassidic	352.59	[7439-44-3]	1000µg/mL	isooctane	1	1mL
3298.23-K-IO	Methyl 13,16-docosadienoate	C22:2	350.58	[61012-47-3]	1000µg/mL	isooctane	1	1mL
3297.23-K-IO	Methyl 13,16,19-docosatrienoate	C22:3	348.56	[108698-01-7]	1000µg/mL	isooctane	1	1mL
3296.23-K-IO	Methyl 7,10,13,16-docosatetraenoate (all-cis)	C22:4	346.55	[13487-42-8]	1000µg/mL	isooctane	1	1mL
3303.23-K-IO	Methyl 4,7,10,13,16-docosapentaenoate	C22:5	344.53	[31930-67-3]	1000µg/mL	isooctane	1	1mL
3295.23-K-IO	Methyl 5,8,11,14,17-docosapentaenoate	C22:5 DPA	330.57		1000µg/mL	isooctane	1	1mL
3294.23-K-IO	Methyl-4,7,10,13,16,19-docosahexaenoate	C22:6 DHA	342.51	[2566-90-7]	1000µg/mL	isooctane	1	1mL
3301.24-K-IO	Methyl 14-tricosenoate	C23:1	366.62	[50995-25-0]	1000µg/mL	isooctane	1	1mL
3302.25-K-IO	Methyl 15-tetracosenoate	C24:1,Nervonic	380.65	[2733-88-2]	1000µg/mL	isooctane	1	1mL



Hygienic products

Hygienic additives

1276.12-1G	α-D(+)-Melibiose hydrate		342.30	[585-99-9]	neat		1	1g
1275.14-100MG	Sodium hyaluronate		433.31	[9067-32-7]	neat		1	100mg

Synthetic musks

3788.12-K-IO	Musk ambrette		268.27	[83-66-9]	1000µg/mL	isooctane	1	1mL
3789.14-K-IO	Musk moskene		278.31	[116-66-5]	1000µg/mL	isooctane	1	1mL
3790.13-K-IO	Musk tibeten		266.29	[145-39-1]	1000µg/mL	isooctane	1	1mL
3791.12-K-IO	Musk xylene		282.23	[81-15-2]	1000µg/mL	isooctane	1	1mL
3792.14-K-IO	Cashmeran	DPMI		[33704-61-9]	1000µg/mL	isooctane	1	1mL
3793.17-K-IO	Celestolide	ADBI	244.38	[13171-00-1]	1000µg/mL	isooctane	1	1mL
3794.18-K-IO	Galaxolide	HHCB	258.40	[1222-05-5]	1000µg/mL	isooctane	1	1mL
3795.17-K-IO	Phantolide	AHMI	244.38	[15323-35-0]	1000µg/mL	isooctane	1	1mL
3796.18-K-IO	Tonalide	AHTN	258.40	[21145-77-7]	1000µg/mL	isooctane	1	1mL
3797.18-K-IO	Traseolide	ATII	258.40	[68140-48-7]	1000µg/mL	isooctane	1	1mL

Reagents

Derivatizing agents and reagents

1933.4-1ML	Acetic anhydride		102.09	[108-24-7]	neat		1	1mL
1933.4-1ML	Acetic anhydride		102.09	[108-24-7]	neat		10	1mL
1942.8-1ML	N,O-Bis(trimethylsilyl)acetamide	BSA	203.43	[10416-59-8]	neat		1	1mL
1942.8-1ML	N,O-Bis(trimethylsilyl)acetamide	BSA	203.43	[10416-59-8]	neat		10	1mL
1942.8-25ML	N,O-Bis(trimethylsilyl)acetamide	BSA	203.43	[10416-59-8]	neat		1	25mL
1366.8-1ML	N,O-Bis(trimethylsilyl) trifluoroacetamide	BSTFA	257.41	[25561-30-2]	neat		1	1mL
1366.8-1ML	N,O-Bis(trimethylsilyl) trifluoroacetamide	BSTFA	257.41	[25561-30-2]	neat		10	1mL
1366.8-50G	N,O-Bis(trimethylsilyl) trifluoroacetamide	BSTFA	257.41	[25561-30-2]	neat		1	50g
1937.0-1ML	Boron trifluoride, 12% in methanol		67.81	[7637-07-2]	neat		10	1mL
1940.3-5ML	Chlorotrimethylsilane	TMCS	108.64		neat			5mL
2915.12-10MG	Dansylchloride-d6		275.79	[75-77-4]	neat		1	10mg
2915.12-25MG	Dansylchloride-d6		275.79	[75-77-4]	neat			25mg
1936.5-1ML	N,N-Dimethylformamide dimethyl acetal		119.16	[4637-24-5]	neat		5	1mL
1930.8-1ML	Heptafluorobutyric anhydride	HFBA	410.07	[336-59-4]	neat		1	1mL
1930.8-1ML	Heptafluorobutyric anhydride	HFBA	410.07	[336-59-4]	neat		10	1mL
1943.6-10ML	1,1,1,3,3,3-Hexamethyldisilazane	HMDS	161.40	[999-97-3]	neat		1	10mL
1895.18-K-IO	Hydrindantin (reduced form of ninhydrin)		322.28	[5103-42-4]	1000µg/mL	isooctane	1	1mL
1895.18-100MG	Hydrindantin (reduced form of ninhydrin)		322.28	[5103-42-4]	neat		1	100mg
1935.5-1ML	N-Methylbis(trifluoroacetamide)		223.08	[685-27-8]	neat		1	1mL
1941.6-1ML	N-Methyl-N-(trimethylsilyl) trifluoroacetamide	MSTFA	199.25	[24589-78-4]	neat		1	1mL
1941.6-5G	N-Methyl-N-(trimethylsilyl) trifluoroacetamide	MSTFA	199.25	[24589-78-4]	neat		1	5g
1941.6-25G	N-Methyl-N-(trimethylsilyl) trifluoroacetamide	MSTFA	199.25	[24589-78-4]	neat		1	25g
1647.7-1ML	Pentafluorobenzoyl chloride		230.52	[2251-50-5]	neat		1	1mL
1647.7-1ML	Pentafluorobenzoyl chloride		230.52	[2251-50-5]	neat		5	1mL
1647.7-5ML	Pentafluorobenzoyl chloride		230.52	[2251-50-5]	neat		1	5mL
1647.7-25ML	Pentafluorobenzoyl chloride		230.52	[2251-50-5]	neat		1	25mL

1931.6-1ML	Pentafluoropropionic anhydride		310.05	[356-42-3]	neat	1	1mL
1931.6-1ML	Pentafluoropropionic anhydride		310.05	[356-42-3]	neat	10	1mL
2275.16-1G	Perfluorokerosene (bp. 210-240)				neat	1	1g
1027.12-500MG	Perfluoro-tri-n-butylamine	Heptacosa	671.10	[311-89-7]	neat	1	500mg
1027.12-5G	Perfluoro-tri-n-butylamine	Heptacosa	671.10	[311-89-7]	neat	1	5g
1944.8-1G	Sodium tetraethylborate		150.05	[15523-24-7]	neat	1	1g
1932.4-1ML	Trifluoroacetic anhydride	TFAA	210.03	[407-25-0]	neat	1	1mL
1932.4-1ML	Trifluoroacetic anhydride	TFAA	210.03	[407-25-0]	neat	10	1mL
1934.5-1ML	1-(Trifluoroacetyl)imidazole	TFAI	164.09	[1546-79-8]	neat	1	1mL
1934.5-1ML	1-(Trifluoroacetyl)imidazole	TFAI	164.09	[1546-79-8]	neat	5	1mL
1939.6-1ML	1-(Trimethylsilyl)imidazole	TMSI	140.26	[18156-74-6]	neat	1	1mL
1939.6-1ML	1-(Trimethylsilyl)imidazole	TMSI	140.26	[18156-74-6]	neat	5	1mL
1939.6-50G	1-(Trimethylsilyl)imidazole	TMSI	140.26	[18156-74-6]	neat	1	50g
1938.8-10G	p-Toluenesulfonyl-N-methyl-N-nitrosamide		214.24	[80-11-5]	neat	1	10g

GC-IRMS standards

0413.10-K-IO	n-Decane GC-IRMS Standard	142.29	[124-18-5]	1000µg/mL	isooctane	1	1mL
0413.10-K-IO	n-Decane GC-IRMS Standard	142.29	[124-18-5]	1000µg/mL	isooctane	5	1mL
0413.10-K-IO	n-Decane GC-IRMS Standard	142.29	[124-18-5]	1000µg/mL	isooctane	10	1mL
0414.11-150-CY	n-Undecane GC-IRMS Standard	156.31	[1120-21-4]	150µg/mL	cyclohexane	1	1mL
0414.11-150-CY	n-Undecane GC-IRMS Standard	156.31	[1120-21-4]	150µg/mL	cyclohexane	5	1mL
0414.11-150-CY	n-Undecane GC-IRMS Standard	156.31	[1120-21-4]	150ug/ml	cyclohexane	10	1mL
0415.12-150-CY	n-Dodecane GC-IRMS Standard	170.34	[112-40-5]	150µg/mL	cyclohexane	1	1mL
0415.12-150-CY	n-Dodecane GC-IRMS Standard	170.34	[112-40-5]	150µg/mL	cyclohexane	5	1mL
0415.12-150-CY	n-Dodecane GC-IRMS Standard	170.34	[112-40-5]	150ug/ml	cyclohexane	10	1mL
0416.13-150-CY	n-Tridecane GC-IRMS Standard	184.37	[629-50-5]	150µg/mL	cyclohexane	1	1mL
0416.13-150-CY	n-Tridecane GC-IRMS Standard	184.37	[629-50-5]	150µg/mL	cyclohexane	5	1mL
0416.13-150-CY	n-Tridecane GC-IRMS Standard	184.37	[629-50-5]	150ug/ml	cyclohexane	10	1mL
0417.14-150-CY	n-Tetradecane GC-IRMS Standard	198.40	[629-59-4]	150µg/mL	cyclohexane	1	1mL
0417.14-150-CY	n-Tetradecane GC-IRMS Standard	198.40	[629-59-4]	150µg/mL	cyclohexane	5	1mL
0417.14-150-CY	n-Tetradecane GC-IRMS Standard	198.40	[629-59-4]	150ug/ml	cyclohexane	10	1mL
0418.15-150-CY	n-Pentadecane GC-IRMS Standard	212.42	[629-62-9]	150µg/mL	cyclohexane	1	1mL
0418.15-150-CY	n-Pentadecane GC-IRMS Standard	212.42	[629-62-9]	150µg/mL	cyclohexane	5	1mL
0418.15-150-CY	n-Pentadecane GC-IRMS Standard	212.42	[629-62-9]	150ug/ml	cyclohexane	10	1mL
0419.16-150-CY	n-Hexadecane GC-IRMS Standard	226.45	[544-76-3]	150µg/mL	cyclohexane	1	1mL
0419.16-150-CY	n-Hexadecane GC-IRMS Standard	226.45	[544-76-3]	150µg/mL	cyclohexane	5	1mL
0419.16-150-CY	n-Hexadecane GC-IRMS Standard	226.45	[544-76-3]	150ug/ml	cyclohexane	10	1mL
0420.17-150-CY	n-Heptadecane GC-IRMS Standard	240.48	[629-78-7]	150µg/mL	cyclohexane	1	1mL
0420.17-150-CY	n-Heptadecane GC-IRMS Standard	240.48	[629-78-7]	150µg/mL	cyclohexane	5	1mL
0420.17-150-CY	n-Heptadecane GC-IRMS Standard	240.48	[629-78-7]	150ug/ml	cyclohexane	10	1mL
0421.18-150-CY	n-Octadecane GC-IRMS Standard	254.50	[593-45-3]	150µg/mL	cyclohexane	1	1mL
0421.18-150-CY	n-Octadecane GC-IRMS Standard	254.50	[593-45-3]	150µg/mL	cyclohexane	5	1mL
0421.18-150-CY	n-Octadecane GC-IRMS Standard	254.50	[593-45-3]	150ug/ml	cyclohexane	10	1mL
0422.19-150-CY	n-Nonadecane GC-IRMS Standard	268.53	[629-92-5]	150µg/mL	cyclohexane	1	1mL
0422.19-150-CY	n-Nonadecane GC-IRMS Standard	268.53	[629-92-5]	150µg/mL	cyclohexane	5	1mL
0422.19-150-CY	n-Nonadecane GC-IRMS Standard	268.53	[629-92-5]	150ug/ml	cyclohexane	10	1mL
0423.20-150-CY	n-Eicosane GC-IRMS Standard	282.56	[112-95-8]	150µg/mL	cyclohexane	1	1mL
0423.20-150-CY	n-Eicosane GC-IRMS Standard	282.56	[112-95-8]	150µg/mL	cyclohexane	5	1mL
0423.20-150-CY	n-Eicosane GC-IRMS Standard	282.56	[112-95-8]	150ug/ml	cyclohexane	10	1mL
0400.21-150-CY	n-Heneicosane GC-IRMS Standard	296.58	[629-94-7]	150µg/mL	cyclohexane	1	1mL
0400.21-150-CY	n-Heneicosane GC-IRMS Standard	296.58	[629-94-7]	150µg/mL	cyclohexane	5	1mL
0400.21-150-CY	n-Heneicosane GC-IRMS Standard	296.58	[629-94-7]	150ug/ml	cyclohexane	10	1mL
0401.22-150-CY	n-Docosane GC-IRMS Standard	310.61	[629-97-0]	150µg/mL	cyclohexane	1	1mL
0401.22-150-CY	n-Docosane GC-IRMS Standard	310.61	[629-97-0]	150µg/mL	cyclohexane	5	1mL
0401.22-150-CY	n-Docosane GC-IRMS Standard	310.61	[629-97-0]	150ug/ml	cyclohexane	10	1mL
0402.23-150-CY	n-Tricosane GC-IRMS Standard	324.64	[638-67-5]	150µg/mL	cyclohexane	1	1mL
0402.23-150-CY	n-Tricosane GC-IRMS Standard	324.64	[638-67-5]	150µg/mL	cyclohexane	5	1mL
0402.23-150-CY	n-Tricosane GC-IRMS Standard	324.64	[638-67-5]	150ug/ml	cyclohexane	10	1mL
0403.24-150-CY	n-Tetracosane GC-IRMS Standard	338.67	[646-31-1]	150µg/mL	cyclohexane	1	1mL
0403.24-150-CY	n-Tetracosane GC-IRMS Standard	338.67	[646-31-1]	150µg/mL	cyclohexane	5	1mL
0403.24-150-CY	n-Tetracosane GC-IRMS Standard	338.67	[646-31-1]	150ug/ml	cyclohexane	10	1mL

0404.25-150-CY	n-Pentacosane GC-IRMS Standard	352.69	[629-99-2]	150µg/mL	cyclohexane	1	1mL
0404.25-150-CY	n-Pentacosane GC-IRMS Standard	352.69	[629-99-2]	150µg/mL	cyclohexane	5	1mL
0404.25-150-CY	n-Pentacosane GC-IRMS Standard	352.69	[629-99-2]	150ug/ml	cyclohexane	10	1mL
0405.26-150-CY	n-Hexacosane GC-IRMS Standard	366.72	[630-01-3]	150µg/mL	cyclohexane	1	1mL
0405.26-150-CY	n-Hexacosane GC-IRMS Standard	366.72	[630-01-3]	150µg/mL	cyclohexane	5	1mL
0405.26-150-CY	n-Hexacosane GC-IRMS Standard	366.72	[630-01-3]	150ug/ml	cyclohexane	10	1mL
0406.27-150-CY	n-Heptacosane GC-IRMS Standard	380.75	[593-49-7]	150µg/mL	cyclohexane	1	1mL
0406.27-150-CY	n-Heptacosane GC-IRMS Standard	380.75	[593-49-7]	150µg/mL	cyclohexane	5	1mL
0406.27-150-CY	n-Heptacosane GC-IRMS Standard	380.75	[593-49-7]	150ug/ml	cyclohexane	10	1mL
0407.28-150-CY	n-Octacosane GC-IRMS Standard	394.77	[630-02-4]	150µg/mL	cyclohexane	1	1mL
0407.28-150-CY	n-Octacosane GC-IRMS Standard	394.77	[630-02-4]	150µg/mL	cyclohexane	5	1mL
0407.28-150-CY	n-Octacosane GC-IRMS Standard	394.77	[630-02-4]	150ug/ml	cyclohexane	10	1mL
0408.30-150-CY	n-Triacontane GC-IRMS Standard	422.83	[638-68-6]	150µg/mL	cyclohexane	1	1mL
0408.30-150-CY	n-Triacontane GC-IRMS Standard	422.83	[638-68-6]	150µg/mL	cyclohexane	5	1mL
0408.30-150-CY	n-Triacontane GC-IRMS Standard	422.83	[638-68-6]	150ug/ml	cyclohexane	10	1mL
0409.32-150-CY	n-Dotriacontane GC-IRMS Standard	450.88	[544-85-4]	150µg/mL	cyclohexane	1	1mL
0409.32-150-CY	n-Dotriacontane GC-IRMS Standard	450.88	[544-85-4]	150µg/mL	cyclohexane	5	1mL
0409.32-150-CY	n-Dotriacontane GC-IRMS Standard	450.88	[544-85-4]	150ug/ml	cyclohexane	10	1mL
0410.36-150-CY	n-Hexatriacontane GC-IRMS Standard	506.99	[630-06-8]	150µg/mL	cyclohexane	1	1mL
0410.36-150-CY	n-Hexatriacontane GC-IRMS Standard	506.99	[630-06-8]	150µg/mL	cyclohexane	5	1mL
0410.36-150-CY	n-Hexatriacontane GC-IRMS Standard	506.99	[630-06-8]	150ug/ml	cyclohexane	10	1mL
0411.40-150-CY	n-Tetracontane GC-IRMS Standard	563.10	[4181-95-7]	150µg/mL	cyclohexane	1	1mL
0411.40-150-CY	n-Tetracontane GC-IRMS Standard	563.10	[4181-95-7]	150µg/mL	cyclohexane	5	1mL
0411.40-150-CY	n-Tetracontane GC-IRMS Standard	563.10	[4181-95-7]	150ug/ml	cyclohexane	10	1mL
1191.23-KIT	GC-IRMS Standard Kit						Kit
0451.3-150-CY	GC-IRMS Standards (C11, C15, C20)			150µg/mL	cyclohexane	1	1mL
0451.3-150-CY	GC-IRMS Standards (C11, C15, C20)			150µg/mL	cyclohexane	5	1mL
0451.3-150-CY	GC-IRMS Standards (C11, C15, C20)			150µg/mL	cyclohexane	10	1mL
0452.3-150-CY	GC-IRMS Standards (C15, C20, C25)			150µg/mL	cyclohexane	1	1mL
0452.3-150-CY	GC-IRMS Standards (C15, C20, C25)			150µg/mL	cyclohexane	5	1mL
0452.3-150-CY	GC-IRMS Standards (C15, C20, C25)			150µg/mL	cyclohexane	10	1mL
0453.3-150-CY	GC-IRMS Standards (C25, C30, C36)			150µg/mL	cyclohexane	1	1mL
0453.3-150-CY	GC-IRMS Standards (C25, C30, C36)			150µg/mL	cyclohexane	5	1mL
0453.3-150-CY	GC-IRMS Standards (C25, C30, C36)			150µg/mL	cyclohexane	10	1mL
0454.4-150-CY	GC-IRMS Standards (C25, C30, C36, C40)			150µg/mL	cyclohexane	1	1mL
0454.4-150-CY	GC-IRMS Standards (C25, C30, C36, C40)			150µg/mL	cyclohexane	5	1mL
0454.4-150-CY	GC-IRMS Standards (C25, C30, C36, C40)			150µg/mL	cyclohexane	10	1mL

Solvents

2270.3-2K-MX	Acetone	2-Propanone	58.08	[67-64-1]	2000µg/mL	9:1 Methanol/water or Methanol	1	1mL
1300.6-5ML	Benzene		78.11	[71-43-2]	neat		1	5mL
2273.6-2K-ME	Chlorobenzene		112.56	[108-90-7]	2000µg/mL	Methanol	1	1mL
1350.1-5ML	Chloroform, 99+%		119.38	[67-66-3]	neat		1	5mL
1382.2-5ML	Ethanol		46.07	[64-17-5]	neat		1	5mL
2271.4-2K-ME	Ethyl acetate		88.11	[141-78-6]	2000µg/mL	Methanol	1	1mL
2271.4-1ML	Ethyl acetate		88.11	[141-78-6]	neat		1	1mL
2272.4-2K-ME	Ethyl ether		74.12	[60-29-7]	2000µg/mL	Methanol	1	1mL
1240.7-K-ME	n-Heptane		100.21	[142-82-5]	1000µg/mL	Methanol	1	1mL
1240.7-10ML	n-Heptane		100.21	[142-82-5]	neat		1	10mL
1232.6-K-ME	n-Hexane		86.18	[110-54-3]	1000µg/mL	Methanol	1	1mL
1232.6-10ML	n-Hexane		86.18	[110-54-3]	neat		1	10mL
1320.3-10ML	Isopropanol		60.10	[67-63-0]	neat		1	10mL
1379.1-5ML	Methanol		32.04	[67-56-1]	neat		1	5mL
1299.5-K-ME	n-Pentane		72.15	[109-66-0]	1000µg/mL	Methanol	1	1mL
1299.5-10ML	n-Pentane		72.15	[109-66-0]	neat	1	10mL	
1375.3-5ML	1-Propanol		60.10	[71-23-8]	neat		1	5mL
2277.5-1ML	Pyridine		79.10	[110-86-1]	neat		1	1mL
2558.8-2ML	Styrene		104.15	[100-42-5]	neat		1	2mL
1203.7-30K-IO	Toluene, 3 Wt% in Isooctane			[108-88-1]	30mg/mL	isooctane	1	1mL
1203.7-30K-IO	Toluene, 3 Wt% in Isooctane		92.14	[108-88-1]	30mg/mL	isooctane	5	1mL
1264.7-1ML	Toluene		92.14	[108-88-1]	neat		1	1mL
1264.7-5ML	Toluene		92.14	[108-88-3]	neat		1	5mL
1267.8-1ML	o-Xylene		106.17	[95-47-6]	neat		1	1mL
1267.8-5ML	o-Xylene		106.17	[95-47-6]	neat		1	5mL
1266.8-1ML	m-Xylene		106.17	[108-38-3]	neat		1	1mL
1265.8-1ML	p-Xylene		106.17	[106-42-3]	neat		1	1mL
1202.6-25ML	Benzene, sulfurdepleted		78.11	[71-43-2]	neat		1	25mL
1201.8-25ML	Isooctane, sulfurdepleted		114.23	[540-84-1]	neat		1	25mL
1205.MX-25ML	Isooctane/Toluene 9:1, sulfurdepleted			[540-84-1]/ [108-88-1]	neat		1	25mL
1206.MX-25ML	Isooctane/Toluene 3:1, sulfurdepleted			[540-84-1]/ [108-88-1]	neat		1	25mL
1198.0-25ML	Heavy White Mineral Oil, sulfurdepleted				neat		1	25mL
1200.0-25ML	Light White Mineral Oil, sulfurdepleted				neat		1	25mL
1203.7-25ML	Toluene, sulfurdepleted			[108-88-1]	neat		1	25mL
1204.8-25ML	Xylene, low sulfur		106.16	[1330-20-7]	neat		1	25mL

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