### **Biosolve Solvents**



Bio-lab Laboratories Ltd.



Biosolve Products are distrubuted by:

#### **Greyhound Chromatography and Allied Chemicals**

6 Kelvin Park, Birkenhead, Merseyside CH41 1LT United Kingdom

Tel: (+44) 0 151 649 4000 Fax: (+44) 0 151 649 4001 Email: sales@greyhoundchrom.com www.greyhoundchrom.com

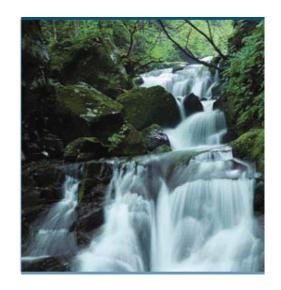




High resolution and sensitivity Micro filtered at 0,1 µm Solvents and formulations







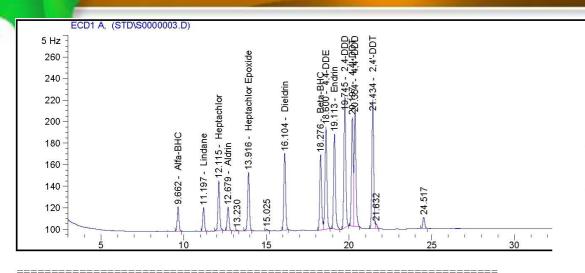


www.sales@greyhoundchrom.com

# **Solvents for Environmental analysis**



Bio-lab Laboratories Ltd.



Area Percent Report

Sorted By : Signal

Calib. Data Modified : 28/05/2008 11:53:09 PM

Multiplier : 1.0000 Dilution : 1.0000

Sample Amount : 1.00000 [ng/ul] (not used in calc.)

Signal 1: ECD1 A,

1 5.840 0.0000 0.00000 0.00000 2-chlorobiphenyl 2 9.662 BB 0.0855 162.03798 2.21472 Alfa-BHC 3 11.197 BB 0.0873 154.86606 2.11669 Lindane 4 11.967 0.0000 0.00000 0.00000 2,4,5-TCB 5 12.115 BB 0.0982 335.14426 4.58072 Heptachlor 6 12.679 BV 0.0928 166.34525 2.27359 Aldrin 7 13.916 BB 0.1017 412.94748 5.64412 Heptachlor Epoxide 8 14.160 0.0000 0.00000 0.00000 Parathion 9 16.104 BB 0.0975 543.53601 7.42899 Dieldrin 10 18.276 BV 0.0996 540.19696 7.38335 Beta-BHC 11 18.600 VB 0.0992 754.30933 10.30982 4,4-DDE 12 19.113 BB 0.1029 701.51019 9.58817 Endrin 13 19.745 PB 0.0988 960.59601 13.12932 2,4-DDD 14 20.197 PV 0.0942 752.12134 10.27991 4,4'-DDT 15 20.354 VB 0.0968 807.76746 11.04048 4,4'-DDD 16 21.434 BV 0.1048 900.37787 12.30627 2,4'-DDT 17 22.860 0.0000 0.00000 2,3,7,8-Dioxine	Peak #	RetTime [min]		[min]	Area [5 Hz*s]	8	Name
2 9.662 BB 0.0855 162.03798 2.21472 Alfa-BHC 3 11.197 BB 0.0873 154.86606 2.11669 Lindane 4 11.967 0.0000 0.00000 0.00000 2,4,5-TCB 5 12.115 BB 0.0982 335.14426 4.58072 Heptachlor 6 12.679 BV 0.0928 166.34525 2.27359 Aldrin 7 13.916 BB 0.1017 412.94748 5.64412 Heptachlor Epoxide 8 14.160 0.0000 0.00000 0.00000 Parathion 9 16.104 BB 0.0975 543.53601 7.42899 Dieldrin 10 18.276 BV 0.0996 540.19696 7.38335 Beta-BHC 11 18.600 VB 0.0992 754.30933 10.30982 4,4-DDE 12 19.113 BB 0.1029 701.51019 9.58817 Endrin 13 19.745 PB 0.0988 960.59601 13.12932 2,4-DDD 14 20.197 PV 0.0942 752.12134 10.27991 4,4'-DDT 15 20.354 VB 0.0968 807.76746 11.04048 4,4'-DDD 16 21.434 BV 0.1048 900.37787 12.30627 2,4'-DDT	1	l				I	I
4       11.967       0.0000       0.00000       0.00000       2,4,5-TCB         5       12.115 BB       0.0982       335.14426       4.58072 Heptachlor         6       12.679 BV       0.0928       166.34525       2.27359 Aldrin         7       13.916 BB       0.1017 412.94748       5.64412 Heptachlor Epoxide         8       14.160       0.0000       0.00000       0.00000 Parathion         9       16.104 BB       0.0975       543.53601       7.42899 Dieldrin         10       18.276 BV       0.0996       540.19696       7.38335 Beta-BHC         11       18.600 VB       0.0992       754.30933       10.30982       4,4-DDE         12       19.113 BB       0.1029       701.51019       9.58817 Endrin         13       19.745 PB       0.0988       960.59601       13.12932       2,4-DDD         14       20.197 PV       0.0942       752.12134       10.27991       4,4'-DDT         15       20.354 VB       0.0968       807.76746       11.04048       4,4'-DDT         16       21.434 BV       0.1048       900.37787       12.30627       2,4'-DDT							to the state of th
5 12.115 BB 0.0982 335.14426 4.58072 Heptachlor 6 12.679 BV 0.0928 166.34525 2.27359 Aldrin 7 13.916 BB 0.1017 412.94748 5.64412 Heptachlor Epoxide 8 14.160 0.0000 0.00000 0.00000 Parathion 9 16.104 BB 0.0975 543.53601 7.42899 Dieldrin 10 18.276 BV 0.0996 540.19696 7.38335 Beta-BHC 11 18.600 VB 0.0992 754.30933 10.30982 4,4-DDE 12 19.113 BB 0.1029 701.51019 9.58817 Endrin 13 19.745 PB 0.0988 960.59601 13.12932 2,4-DDD 14 20.197 PV 0.0942 752.12134 10.27991 4,4'-DDT 15 20.354 VB 0.0968 807.76746 11.04048 4,4'-DDD 16 21.434 BV 0.1048 900.37787 12.30627 2,4'-DDT	3	11.197	ВВ	0.0873	154.86606	2.11669	Lindane
6 12.679 BV 0.0928 166.34525 2.27359 Aldrin 7 13.916 BB 0.1017 412.94748 5.64412 Heptachlor Epoxide 8 14.160 0.0000 0.00000 0.00000 Parathion 9 16.104 BB 0.0975 543.53601 7.42899 Dieldrin 10 18.276 BV 0.0996 540.19696 7.38335 Beta-BHC 11 18.600 VB 0.0992 754.30933 10.30982 4,4-DDE 12 19.113 BB 0.1029 701.51019 9.58817 Endrin 13 19.745 PB 0.0988 960.59601 13.12932 2,4-DDD 14 20.197 PV 0.0942 752.12134 10.27991 4,4'-DDT 15 20.354 VB 0.0968 807.76746 11.04048 4,4'-DDD 16 21.434 BV 0.1048 900.37787 12.30627 2,4'-DDT	4	11.967		0.0000	0.00000	0.00000	2,4,5-TCB
7 13.916 BB 0.1017 412.94748 5.64412 Heptachlor Epoxide 8 14.160 0.0000 0.00000 0.00000 Parathion 9 16.104 BB 0.0975 543.53601 7.42899 Dieldrin 10 18.276 BV 0.0996 540.19696 7.38335 Beta-BHC 11 18.600 VB 0.0992 754.30933 10.30982 4,4-DDE 12 19.113 BB 0.1029 701.51019 9.58817 Endrin 13 19.745 PB 0.0988 960.59601 13.12932 2,4-DDD 14 20.197 PV 0.0942 752.12134 10.27991 4,4'-DDT 15 20.354 VB 0.0968 807.76746 11.04048 4,4'-DDD 16 21.434 BV 0.1048 900.37787 12.30627 2,4'-DDT	5	12.115	BB	0.0982	335.14426	4.58072	Heptachlor
8 14.160 0.0000 0.00000 0.00000 Parathion 9 16.104 BB 0.0975 543.53601 7.42899 Dieldrin 10 18.276 BV 0.0996 540.19696 7.38335 Beta-BHC 11 18.600 VB 0.0992 754.30933 10.30982 4,4-DDE 12 19.113 BB 0.1029 701.51019 9.58817 Endrin 13 19.745 PB 0.0988 960.59601 13.12932 2,4-DDD 14 20.197 PV 0.0942 752.12134 10.27991 4,4'-DDT 15 20.354 VB 0.0968 807.76746 11.04048 4,4'-DDD 16 21.434 BV 0.1048 900.37787 12.30627 2,4'-DDT	6	12.679	BV	0.0928	166.34525	2.27359	Aldrin
9 16.104 BB 0.0975 543.53601 7.42899 Dieldrin 10 18.276 BV 0.0996 540.19696 7.38335 Beta-BHC 11 18.600 VB 0.0992 754.30933 10.30982 4,4-DDE 12 19.113 BB 0.1029 701.51019 9.58817 Endrin 13 19.745 PB 0.0988 960.59601 13.12932 2,4-DDD 14 20.197 PV 0.0942 752.12134 10.27991 4,4'-DDT 15 20.354 VB 0.0968 807.76746 11.04048 4,4'-DDD 16 21.434 BV 0.1048 900.37787 12.30627 2,4'-DDT		13.916	BB	0.1017	412.94748	5.64412	Heptachlor Epoxide
10 18.276 BV 0.0996 540.19696 7.38335 Beta-BHC 11 18.600 VB 0.0992 754.30933 10.30982 4,4-DDE 12 19.113 BB 0.1029 701.51019 9.58817 Endrin 13 19.745 PB 0.0988 960.59601 13.12932 2,4-DDD 14 20.197 PV 0.0942 752.12134 10.27991 4,4'-DDT 15 20.354 VB 0.0968 807.76746 11.04048 4,4'-DDD 16 21.434 BV 0.1048 900.37787 12.30627 2,4'-DDT				0.0000	0.00000	0.00000	Parathion
11 18.600 VB 0.0992 754.30933 10.30982 4,4-DDE 12 19.113 BB 0.1029 701.51019 9.58817 Endrin 13 19.745 PB 0.0988 960.59601 13.12932 2,4-DDD 14 20.197 PV 0.0942 752.12134 10.27991 4,4'-DDT 15 20.354 VB 0.0968 807.76746 11.04048 4,4'-DDD 16 21.434 BV 0.1048 900.37787 12.30627 2,4'-DDT							
12 19.113 BB 0.1029 701.51019 9.58817 Endrin 13 19.745 PB 0.0988 960.59601 13.12932 2,4-DDD 14 20.197 PV 0.0942 752.12134 10.27991 4,4'-DDT 15 20.354 VB 0.0968 807.76746 11.04048 4,4'-DDD 16 21.434 BV 0.1048 900.37787 12.30627 2,4'-DDT	10	18.276	BV	0.0996	540.19696	7.38335	Beta-BHC
13 19.745 PB 0.0988 960.59601 13.12932 2,4-DDD 14 20.197 PV 0.0942 752.12134 10.27991 4,4'-DDT 15 20.354 VB 0.0968 807.76746 11.04048 4,4'-DDD 16 21.434 BV 0.1048 900.37787 12.30627 2,4'-DDT	11						
14 20.197 PV 0.0942 752.12134 10.27991 4,4'-DDT 15 20.354 VB 0.0968 807.76746 11.04048 4,4'-DDD 16 21.434 BV 0.1048 900.37787 12.30627 2,4'-DDT							
15 20.354 VB 0.0968 807.76746 11.04048 4,4'-DDD 16 21.434 BV 0.1048 900.37787 12.30627 2,4'-DDT			(1) e (1) e (2)				The state of the s
16 21.434 BV 0.1048 900.37787 12.30627 2,4'-DDT							\$2
17 22.860 0.0000 0.00000 0.00000 2.3.7.8-Dioxine							
							The state of the s
18 30.460 0.0000 0.00000 0.00000 Deca-PCB	18	30.460		0.0000	0.00000	0.00000	Deca-PCB

 Solvents for Extraction-Concentration methods.



- Suitable for EPA methods.
- Each batch is tested against internal standards.
- Each batch is tested after 1000:1 concentration.

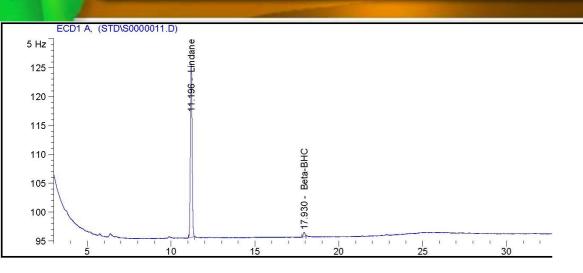


Totals: 7191.75618 98.2962

## **Pesti-S grade < 5ppb as Lindane**



Bio-lab Laboratories Ltd.



Area Percent Report

Sorted By : Signa

Calib. Data Modified : 28/05/2008 11:53:09 PM

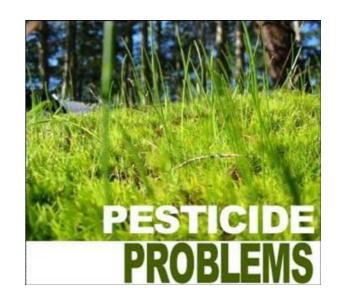
Multiplier : 1.0000 Dilution : 1.0000

Sample Amount : 1.00000 [ng/ul] (not used in calc.)

Signal 1: ECD1 A,

Peak #	RetTime [min]	.I.Хbе	Width	Area [5 Hz*s]	Area %	Name
				[5 112 5]		
1				•		2-chlorobiphenyl
1 2 3	9.662		0.0000			Alfa-BHC
3	11.196	BP	0.0890	215.79961	97.53590	Lindane
4	11.967		0.0000	0.00000	0.00000	2,4,5-TCB
5	12.115		0.0000	0.00000	0.00000	Heptachlor
6	12.679		0.0000	0.00000	0.00000	Aldrin
7	13.920		0.0000	0.00000	0.00000	Heptachlor Epoxide
8	14.160			0.00000		
9	16.104			0.00000		
10	17.930	PB	0.0860	5.45186	2.46410	Beta-BHC
11	18.600		0.0000	0.00000	0.00000	
12	19.113		0.0000			
13			0.0000		0.00000	TO THE STATE OF TH
14	20.197		0.0000	0.00000		4,4'-DDT
15	20.354		0.0000			4,4'-DDD
16	21.434		0.0000			2,4'-DDT
17			0.0000			2,3,7,8-Dioxine
18	30.460		0.0000	0.00000	0.00000	Deca-PCB
Totals: 221.25146 100.0000						

- Solvents suitable for all analysis of common Pesticides
- Each batch is tested after 1000:1 concentration.
- Each batch is tested against internal standard Lindane <5ppb.</li>

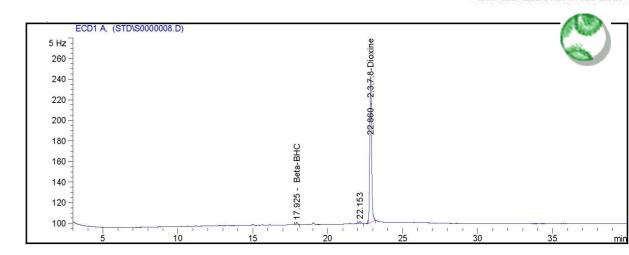


### Dioxin & PCB grade



#### Bio-lab Laboratories Ltd.

- Solvents suitable for all analysis of 209 PCB range, from 2-PCB to Deca-PCB, including TCDD isomers, (Mainly 2,3,7,8-TCDD).
- Each batch is tested after 1000:1 concentration.
- Samples tested against internal standard of <5ppb 2,3,7,8-TCDD.</li>



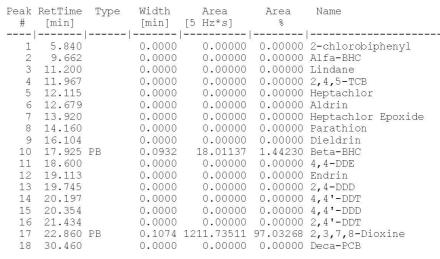
Area Percent Report

Sorted By : Signal Calib. Data Modified : 28/05/2008 11:53:09 PM

Multiplier : 1.0000 Dilution : 1.0000

Sample Amount : 1.00000 [ng/ul] (not used in calc.)

Signal 1: ECD1 A,



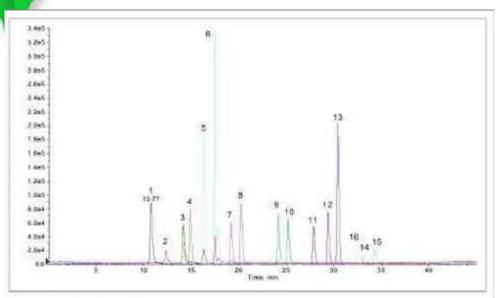
Totals: 1229.74648 98.4750

#### **PAH - Polycyclic Aromatic Hydrocarbons grade**



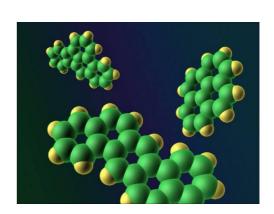
Bio-lab Laboratories Ltd.





Reversed	phase chromatogr	aphy.
URAGI260	priase circulatori	aprity.

			(pg on column)	(pg on column
1	Naphthalene	128	100	1000
2	Acenaphthylene	152	200	4000
3	Acenaphthene	154	10	500
4	Fluorene	166	20	400
5	Phenanthrene	178	5*	400
6	Anthracene	178	5*	400
7	Fluoranthene	202	10	400
8	Pyrene	202	10	400
9	Benz(a)anthracene	228	5*	100
10	Chrysene	228	5*	100
11	Benzo(b)fluoranthene	252	10*	400
12	Benzo(k)fluoranthene	252	10*	400
13	Benzo(a)pyrene	252	10	40
14	Benzo(g,h,l)perylene	276	20	100
15	Indeno(1,2,3,c,d)pyrene	276	20	100
16	Dibenz(a,h)anthracene	278	20	100

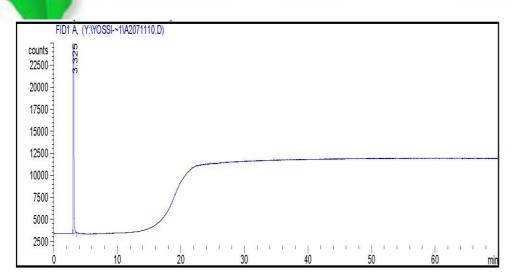


- Solvents for PAH analysis, tested in the range of 16 PAH standards recommended by EPA.
- Each batch is tested after 1000:1 concentration.
- Each batch is tested against internal standard <2ppb PAH.</li>

### LV-GC grade



Bio-lab Laboratories Ltd.



Area Percent Report

-----

Sorted By : Signal

Calib. Data Modified : 5/20/2008 5:35:38 PM

Multiplier : 1.0000 Dilution : 1.0000

Signal 1: FID1 A,

Peak #	RetTime [min]	Туре	Width [min]	Area counts*s	Area %	Name
1	3.325	PBA+	0.0580	2.19718e8	1.000e2	?
2	4.166		0.0000	0.00000	0.00000	n-Decane(C10)
3	4.764		0.0000	0.00000	0.00000	n-Undecane (C11)
4	5.637		0.0000	0.00000	0.00000	n-Dodecane (C12)
5	12.654		0.0000	0.00000	0.00000	n-Heptadecane (C17)
6	35.914		0.0000	0.00000	0.00000	Dotriacontane (C32)
7	56.000		0.0000	0.00000	0.00000	Tetracontane (C40)

- Solvents suitable for Environmental analysis, tested for:
- . Hydrocarbons  $C_{10}$ - $C_{40}$  <0.1ppm
- FID suitability <10ppm as 2-Octanol</li>
- Pesticide analysis <5ppb as Lindane</li>
- Dioxine & PCB tested <5ppb as TCDD</li>
- PAH suitability by UV and Fluorecence detectors
- Extremely low volatile residues.
- High UV transmittance.
- Each batch is tested after 1000:1 concentration.



Totals: 2.19718e8