

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/18/2012

Reviewed on 03/02/2010

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Acetone
- **Article number:** 0103
- **EC number:**
200-662-2
- **Index number:**
606-001-00-8
- **Application of the substance / the preparation**
Chemical for research, development, manufacturing and analysis
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Biosolve B.V.
Leenderweg 78, 5555 CE Valkenswaard, the Netherlands.
Tel: +31-(0)40-2071300
Fax: +31-(0)40-2048537
Email: info@biosolve-chemicals.com

Biosolve Chimie
20 Rue Roger Husson, 57260 Dieuze, France
info@biosolvechimie.com

Bio-Lab Ltd.
POB 34038, Jerusalem 91340, Israel
Tel: + 972 -2- 584 1111
Fax: + 972 -2- 584 1110
Email: info@biolab-chemicals.com

- **Information department:** Product safety department
- **Emergency telephone number:** During normal opening times: +972 2 584 1111

2 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**
Acetone
- **Identification number(s)**
- **EC number:** 200-662-2
- **Index number:** 606-001-00-8

3 Hazards identification

- **Classification of the substance or mixture**



GHS02 Flame

H225 Highly flammable liquid and vapour.



GHS07

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

(Contd. on page 2)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/18/2012

Reviewed on 03/02/2010

Trade name: Acetone

(Contd. of page 1)

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Irritant

Irritating to eyes.



Highly flammable

Highly flammable.

Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

· **Information concerning particular hazards for human and environment:**

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

· **Label elements**

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Code letter and hazard designation of product:**



Irritant

Highly flammable

· **Risk phrases:**

Highly flammable.

Irritating to eyes.

Repeated exposure may cause skin dryness or cracking.

Vapours may cause drowsiness and dizziness.

· **Safety phrases:**

Keep out of the reach of children.

Keep container in a well-ventilated place.

Keep away from sources of ignition - No smoking.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 3

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



HEALTH 1 Health = 1

FIRE 3 Fire = 3

REACTIVITY 0 Reactivity = 0

4 First aid measures

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Generally the product does not irritate the skin.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult doctor.

5 Firefighting measures

· **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

(Contd. on page 3)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/18/2012

Reviewed on 03/02/2010

Trade name: Acetone

(Contd. of page 2)

- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling** Store in cool, dry place in tightly closed receptacles.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**

Acetone

PEL	2400 mg/m ³ , 1000 ppm
REL	590 mg/m ³ , 250 ppm
TLV	Short-term value: (1782) NIC-1187 mg/m ³ , (750) NIC-500 ppm
	Long-term value: (1188) NIC-475 mg/m ³ , (500) NIC-200 ppm
	BEI

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

(Contd. on page 4)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/18/2012

Reviewed on 03/02/2010

Trade name: Acetone

(Contd. of page 3)

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

- **General Information**

- **Appearance:**

Form:	Fluid
Color:	Colorless
Odor:	Characteristic
Odour threshold:	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range:	94.7°C (202 °F)
Boiling point/Boiling range:	55.8-56.6°C (132-134 °F)

- **Flash point:** < -18°C (< -0 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 465°C (869 °F)

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Not determined.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- **Explosion limits:**

Lower:	2.6 Vol %
Upper:	13 Vol %

- **Vapor pressure at 20°C (68 °F):** 233 hPa (175 mm Hg)

- **Density at 20°C (68 °F):** 0.79 g/cm³ (6.593 lbs/gal)

- **Relative density** Not determined.

- **Vapour density** Not determined.

- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with**

Water: Fully miscible.

- **Segregation coefficient (n-octanol/water):** Not determined.

- **Viscosity:**

Dynamic at 25°C (77 °F):	32 mPas
Kinematic:	Not determined.

(Contd. on page 5)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/18/2012

Reviewed on 03/02/2010

Trade name: Acetone

(Contd. of page 4)

· **Other information** No further relevant information available.

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** UNI090
- **UN proper shipping name**
- **DOT, IMDG, IATA** ACETONE
- **ADR** 1090 ACETONE

(Contd. on page 6)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/18/2012

Reviewed on 03/02/2010

Trade name: Acetone

(Contd. of page 5)

· **Transport hazard class(es)**· **DOT, IMDG, IATA**

· **Class** 3 Flammable liquids.
 · **Label** 3

· **ADR**

· **Class** 3 (F1) Flammable liquids
 · **Label** 3

· **Packing group**· **DOT, ADR, IMDG, IATA** II· **Environmental hazards:**· **Marine pollutant:** No· **Special precautions for user**

Warning: Flammable liquids

· **Danger code (Kemler):**

33

· **EMS Number:**

F-E,S-D

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **UN "Model Regulation":**

UN1090, ACETONE, 3, II

15 Regulatory information

· **Sara**· **Section 355 (extremely hazardous substances):** Substance is not listed.· **Section 313 (Specific toxic chemical listings):** Substance is not listed.· **TSCA (Toxic Substances Control Act):** Substance is listed.· **Proposition 65**· **Chemicals known to cause cancer:** Substance is not listed.· **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.· **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.· **Chemicals known to cause developmental toxicity:** Substance is not listed.· **Carcinogenic categories**· **EPA (Environmental Protection Agency)**

Acetone

I

· **IARC (International Agency for Research on Cancer)** Substance is not listed.· **NTP (National Toxicology Program)** Substance is not listed.· **TLV (Threshold Limit Value established by ACGIH)**

Acetone

A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.· **OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

(Contd. on page 7)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/18/2012

Reviewed on 03/02/2010

Trade name: Acetone

(Contd. of page 6)

· **Hazard symbols:**



Irritant
Highly flammable

· **Risk phrases:**

Highly flammable.
Irritating to eyes.
Repeated exposure may cause skin dryness or cracking.
Vapours may cause drowsiness and dizziness.

· **Safety phrases:**

Keep out of the reach of children.
Keep container in a well-ventilated place.
Keep away from sources of ignition - No smoking.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:** Product safety department

· **Contact:** Product safety department

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

LATA: International Air Transport Association

ICAO: International Civil Aviation Organization

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

USA



Supplied By:

Greyhound Chromatography and Allied Chemicals
6 Kelvin Park
Birkenhead
Merseyside
CH41 1LT
UK

Tel: +44 (0) 151 649 4000

Fax: +44 (0) 151 649 4001