

**Safety Data Sheet**  
 according to 1907/2006/EC, Article 31

Printing date 21.09.2010

Revision: 18.04.2010

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

· **Product details**

· **Trade name: propan-2-ol**

· **Article number:** 1626

· **Application of the substance / the preparation**

Chemical for research, development, manufacturing and analysis

· **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](mailto:info@biosolve-chemicals.com)

Biosolve Chimie

20 Rue Roger Husson, 57260 Dieuze, France

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Bio-Lab Ltd.

POB 34038, Jerusalem 91340, Israel

Tel: + 972 -2- 584 1111

Fax: + 972 -2- 584 1110

Email: [info@biolab-chemicals.com](mailto:info@biolab-chemicals.com)

· **Further information obtainable from:** Product safety department

· **Information in case of emergency:** During normal opening times: +972 2 584 1111

**2 Hazards identification**

· **Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

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



**Xi; Irritant**

R36: Irritating to eyes.



**F; Highly flammable**

R11: Highly flammable.

R67: Vapours may cause drowsiness and dizziness.

(Contd. on page 2)

# Safety Data Sheet

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(Contd. of page 1)

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
- **Hazard pictograms**



GHS02 GHS07

- **Signal word** *Danger*
- **Hazard statements**
  - H225 Highly flammable liquid and vapour.
  - H319 Causes serious eye irritation.
  - H336 May cause drowsiness or dizziness.
- **Precautionary statements**
  - P101 If medical advice is needed, have product container or label at hand.
  - P102 Keep out of reach of children.
  - P103 Read label before use.
  - P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  - P241 Use explosion-proof electrical/ventilating/lighting/equipment.
  - P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P405 Store locked up.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

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



*Xi Irritant*  
*F Highly flammable*

- **Risk phrases:**
  - 11 Highly flammable.
  - 36 Irritating to eyes.
  - 67 Vapours may cause drowsiness and dizziness.
- **Safety phrases:**
  - 2 Keep out of the reach of children.
  - 7 Keep container tightly closed.
  - 16 Keep away from sources of ignition - No smoking.
  - 24/25 Avoid contact with skin and eyes.

### 3 Composition/information on ingredients

- **Chemical characterization:**
- **CAS No. Description**  
67-63-0 propan-2-ol
- **Identification number(s)**
- **EINECS Number:** 200-661-7

(Contd. on page 3)

EU

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(Contd. of page 2)

## 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:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.

## 7 Handling and storage

- **Handling:**
- **Information for safe handling:** Store in cool, dry place in tightly closed receptacles.
- **Information about fire - and explosion protection:**  
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 container tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making 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.

(Contd. on page 4)

# Safety Data Sheet

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Revision: 18.04.2010

**Trade name: propan-2-ol**

(Contd. of page 3)

- **Respiratory protection:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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  
**Colour:** Clear  
**Odour:** Alcohol-like

- **Change in condition**

**Melting point/Melting range:** -89,5°C  
**Boiling point/Boiling range:** 82°C

- **Flash point:** 13°C

- **Ignition temperature:** 425°C

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

- **Explosion limits:**

**Lower:** 2 Vol %  
**Upper:** 12 Vol %

- **Vapour pressure at 20°C:** 43 hPa

- **Density at 20°C:** 0,785 g/cm<sup>3</sup>

- **Solubility in / Miscibility with water at 20°C:**

1 g/l

- **pH-value (- g/l) :** neutral

- **Viscosity:**

**Dynamic at 20°C:** 2,43 mPas

EU

(Contd. on page 5)

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(Contd. of page 4)

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

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

Oral	LD50	5045 mg/kg (rat)
Dermal	LD50	12800 mg/kg (rabbit)
Inhalative	LC50/4 h	30 mg/l (rat)

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

## 12 Ecological information

- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (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

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

## 14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.
- **Danger code (Kehler):** 33
- **UN-Number:** 1219
- **Packaging group:** II
- **Hazard label:** 3
- **Description of goods:** 1219 ISOPROPANOL (ISOPROPYL ALCOHOL)

(Contd. on page 6)

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(Contd. of page 5)

· **Tunnel restriction code D/E**· **Maritime transport IMDG:**

- **IMDG Class:** 3
- **UN Number:** 1219
- **Label** 3
- **Packaging group:** II
- **EMS Number:** F-E,S-D
- **Marine pollutant:** No
- **Proper shipping name:** ISOPROPANOL (ISOPROPYL ALCOHOL)

· **Air transport ICAO-TI and IATA-DGR:**

- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1219
- **Label** 3
- **Packaging group:** II
- **Proper shipping name:** ISOPROPANOL (ISOPROPYL ALCOHOL)

· **UN "Model Regulation":** UN1219, ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II

### 15 Regulatory information

· **Chemical safety assessment** A Chemical Safety Assessment has not been carried out.

### 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

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent