

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 14.01.2010

Revision: 14.01.2010

1 Identification of substance:

· **Product details:**

· **Trade name:** 1-propanol

· **Article number:** 8066, 9086-33, 9086-01

· **Application of the substance / the preparation :** For Laboratory, Research or Manufacturing use.

· **Manufacturer/Supplier:**

Mallinckrodt Baker B.V

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The Netherlands

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· **Informing department:**

Quality Systems & Regulatory Affairs

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· **Emergency information:**

Environment Health & Safety department

during normal opening times (8 am till 5.30 pm) tel: (+31)(0) 570 687500

2 Hazards identification

· **Hazard designation:**



Xi Irritant

F Highly flammable

· **Information pertaining to particular dangers for man and environment**

Has a narcotizing effect.

R 11 Highly flammable.

R 41 Risk of serious damage to eyes.

R 67 Vapours may cause drowsiness and dizziness.

· **GHS label elements**



Danger

H225 - Highly flammable liquid and vapour.



Danger

H318 - Causes serious eye damage.



Warning

H336 - May cause drowsiness or dizziness.

· **Prevention:**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

· **Response:**

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.

P310 Immediately call a POISON CENTER or doctor/physician.

· **Storage:**

P405 Store locked up.

· **Disposal:**

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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3 Composition/information on ingredients

- **Chemical characterization:**
- **CAS No. Designation:**
71-23-8 1-propanol
- **Identification number(s):**
- **EINECS Number:** 200-746-9
- **Index number:** 603-003-00-0

4 First aid measures

- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact** The product is not skin irritating.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.
- **After swallowing** In case of persistent symptoms consult doctor.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet 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:**
Prevent material from reaching sewage system, holes and cellars.
Dilute with plenty of 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 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 containers:** Store in 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 containers.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

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Components with critical values that require monitoring at the workplace:

71-23-8 1-propanol

WEL ()	Short-term value: 625 mg/m ³ , 250 ppm
	Long-term value: 500 mg/m ³ , 200 ppm
Sk	

Additional information: The lists that were valid during the compilation were used as basis.

Personal protective equipment

General protective and hygienic measures

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes.

Breathing equipment: Filter A

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

Butyl rubber, BR

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 safety glasses.

Body protection: Protective work clothing.

9 Physical and chemical properties:

General Information

Form:	Fluid
Colour:	Colourless
Smell:	Alcohol-like

Change in condition

Melting point/Melting range: -127°C

Boiling point/Boiling range: 96.5-97.5°C

Flash point: 15°C

Ignition temperature: 360°C

Danger of explosion: Product is not explosive. However, formation of explosive air/steam mixtures is possible.

Critical values for explosion:

Lower:	2.1 Vol %
Upper:	13.5 Vol %

Steam pressure at 20°C: 19 hPa

Density at 20°C: 0.8035 g/cm³

Solubility in / Miscibility with

Water at 20°C: 1 g/l

pH-value (200 g/l) at 20°C: 7

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· **Viscosity:**
dynamic at 20°C: 2.3 mPas

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** Heat, boiling temperatures.
- **Materials to be avoided:**
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of composition:** No dangerous decomposition products known

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

Oral	LD50	8000 mg/kg (rat)
Dermal	LD50	4000 mg/kg (rab)
	LC50/72h	9.8 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:**
redness
Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effect known.

12 Ecological information:

- **General notes:**
Water hazard class (D) 1 (Assessment by list): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

13 Disposal considerations

- **Product:**
- **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 cleaning agent:** Water, if necessary with cleaning agent.

14 Transport information

· **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**



· **ADR/RID-GGVS/E Class:** 3 Flammable liquids.

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- **Kemler Number:** 33
- **UN-Number:** 1274
- **Packaging group:** II
- **Label** 3
- **Designation of goods:** 1274 PROPANOL (PROPYL ALCOHOL, NORMAL)
- **Limited quantities (LQ)** LQ4
- **Transport category** 2
- **Tunnel restriction code** D/E

· **Maritime transport IMDG/GGVSea:**



- **IMDG/GGVSea Class:** 3
- **UN Number:** 1274
- **Label** 3
- **Packaging group:** II
- **EMS Number:** F-E,S-D
- **Marine pollutant:** No
- **Correct technical name:** PROPANOL (PROPYL ALCOHOL, NORMAL)

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



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1274
- **Label** 3
- **Packaging group:** II
- **Correct technical name:** PROPANOL (PROPYL ALCOHOL, NORMAL)

- **UN "Model Regulation":** UN1274, PROPANOL (PROPYL ALCOHOL, NORMAL), 3, II

15 Regulatory information

· **Designation according to EC guidelines:**

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)

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

Xi Irritant
F Highly flammable

· **Risk phrases:**

11 Highly flammable.
41 Risk of serious damage 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 Avoid contact with skin.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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39 Wear eye/face protection.

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16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing data specification sheet:** Quality Assurance Department

· **Contact:** Sjors duteweert

· **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

· *** Data compared to the previous version altered.**

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