

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

Printing date 25.08.2007

Revision: 25.08.2007

1 Identification of substance:

· **Product details:**

· **Trade name:** 2-Propanol

· **Article number:** 9084

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

Laboratory chemicals

Solvents

Chemicals for synthesis

· **Manufacturer/Supplier:**

Mallinckrodt Baker B.V

P.O.Box 1

7400 AA Deventer

The Netherlands

· **Informing department:**

Quality Systems & Regulatory Affairs

E-mail : sjors.duteweert@covidien.com

· **Emergency information:**

Environment Health & Safety department

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

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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 36 Irritating to eyes.

R 67 Vapours may cause drowsiness and dizziness.

3 Composition/information on ingredients

· **Chemical characterization:**

· **CAS No. Designation:**

67-63-0 2-Propanol

· **Identification number(s):**

· **EINECS Number:** 200-661-7

· **EC Number:** 603-117-00-0

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. If symptoms persist, consult doctor.

· **After swallowing**

Rinse out mouth

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Seek medical treatment.

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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:** Wear self-contained breathing apparatus.

6 Accidental release measures

- **Person-related safety precautions:**
Keep away from ignition sources
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 for safe handling:** No special precautions necessary if used correctly.
- **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:** Store away from oxidizing agents.
- **Further information about storage conditions:**
+5°C - +30°C
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.

- **Components with critical values that require monitoring at the workplace:**

67-63-0 2-Propanol

WEL ()	Short-term value: 1250 mg/m ³ , 500 ppm Long-term value: 999 mg/m ³ , 400 ppm
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- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes.

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Avoid contact with the eyes and skin.

· **Breathing equipment:**

Breathing protection recommended.

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**

Nitrile rubber, NBR

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**

In full contact:

Layer thickness : 0.40 mm

Breakthrough time: >480 min.

The exact break trough 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: Liquid
Colour: Clear
Smell: Alcohol-like

· **Change in condition**

Melting point/Melting range: -89.5°C

Boiling point/Boiling range: 82°C

· **Flash point:** 12°C

· **Ignition temperature:** 425°C

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

· **Critical values for explosion:**

Lower: 2 Vol %

Upper: 12 Vol %

· **Steam pressure at 20°C:** 48 hPa

· **Density at 20°C:** 0.785 g/cm³

· **Solubility in / Miscibility with Water at 20°C:** 1.000 g/l

· **pH-value (- g/l) :** neutral

· **Segregation coefficient (n-octanol/water):** 0.05 log POW

· **Viscosity:**

dynamic at 20°C: 2.43 mPas

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10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** Heat,boiling teperatures.
- **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	5045 mg/kg (rat)
	LDLo	3570 mg/kg (Human)
Dermal	LD50	13400 mg/kg (rat)
		12800 mg/kg (rabbit)
Inhalative	LC50/4h	46.5 mg/l (rat)

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

12 Ecological information:

- **Ecotoxic effects:**

· Acquatic toxicity:	
EC5 / 16h	1050 mg/l (Pseudomonas putida.)
EC50/48h	13299 mg/l (daphnia magna)
IC5 / 8 d	1800 mg/l (Scenedesmus quadricauda)
IC50 / 72h	>1000 mg/l (Desmodesmus subspicatus)
LC50/96h	9640 mg/l (Fathead minnow (Pimephales promelas))

- **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.

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14 Transport information

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



- ADR/RID-GGVS/E Class: 3 Flammable liquids.
- Kemler Number: 33
- UN-Number: 1219
- Packaging group: II
- Label: 3
- Designation of goods: 1219 ISOPROPANOL (ISOPROPYL ALCOHOL)
- Limited quantities (LQ): LQ4
- Transport category: 2
- Tunnel restriction code: D1E

· Maritime transport IMDG/GGVSea:



- IMDG/GGVSea Class: 3
- UN Number: 1219
- Label: 3
- Packaging group: II
- EMS Number: F-E,S-D
- Correct technical name: ISOPROPANOL (ISOPROPYL ALCOHOL)

· Air transport ICAO-TI and IATA-DGR:



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

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.
36 Irritating to eyes.
67 Vapours may cause drowsiness and dizziness.

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· **Safety phrases:**

- 7 Keep container tightly closed.
- 16 Keep away from sources of ignition - No smoking.
- 24/25 Avoid contact with skin and eyes.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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

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