

# SAFETY DATA SHEET

according to Regulation (EC) No.

1907/2006

Version 5.0 Revision Date 11.09.2018

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifiers

Product name : Propylene carbonate

CAS-No. : 108-32-7

EC : 210-478-4

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : This product is used in macro molecule industry, gas separating technology

and electro chemistry. It is specially used for absorbing natural gas and carbon dioxide in petrochemical plant and as plasticizer, textile solvent

and

alkenes and aromatic hydrocarbon extracting solvents

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]**

Eye irritation (Category 2)

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

Irritating to eyes.

### 2.2 Label elements

**Labelling according Regulation (EC) No 1272/2008 [CLP]**

Pictogram



Signal word : Warning

Hazard statement(s)

H319 : Causes serious eye irritation.

Precautionary statement(s)

P305 + P351 + P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Statements : none

**According to European Directive 67/548/EEC as amended.**

Hazard symbol(s)



R-phrases(s)  
R36 Irritating to eyes.  
S-phrases(s) none

## 2.3 Other hazards - none

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Synonyms : 1,2-Propanediol cyclic carbonate  
4-Methyl-1,3-dioxolan-2-one

Formula : C<sub>4</sub>H<sub>6</sub>O<sub>3</sub>  
Molecular Weight : 102,09 g/mol

Component		Concentration
<b>Propylene carbonate</b>		
CAS-No.	108-32-7	-
EC-No.	203-572-1	

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### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

##### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

##### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

##### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

##### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

Nausea, Headache, Vomiting, Central nervous system depression, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### 4.3 Indication of any immediate medical attention and special treatment needed

no data available

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### 5. FIREFIGHTING MEASURES

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 5.2 Special hazards arising from the substance or mixture

Carbon oxides

#### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 5.4 Further information

no data available

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### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

## **6.2 Environmental precautions**

Do not let product enter drains.

## **6.3 Methods and materials for containment and cleaning up**

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

## **6.4 Reference to other sections**

For disposal see section 13.

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## **7. HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

### **7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Moisture sensitive.

### **7.3 Specific end uses**

no data available

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## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Control parameters**

**Components with workplace control parameters**

### **8.2 Exposure controls**

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### **Personal protective equipment**

##### **Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### **Immersion protection**

Material: Nature latex/chloroprene

Minimum layer thickness: 0,6 mm

Break through time: > 480 min

Material tested:Lapren® (Aldrich Z677558, Size M)

##### **Splash protection**

Material: Nature latex/chloroprene

Minimum layer thickness: 0,6 mm

Break through time: > 30 min

Material tested:Lapren® (Aldrich Z677558, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

a) Appearance	Form: liquid, clear Colour: colourless
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	7 at 200 g/l at 20 °C
e) Melting point/freezing point	Melting point/range: -55 °C - lit.
f) Initial boiling point and boiling range	240 °C - lit.
g) Flash point	132 °C - closed cup
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	Upper explosion limit: 14,3 %(V) Lower explosion limit: 1,8 %(V)
k) Vapour pressure	0,17 hPa at 20 °C 1,31 hPa at 50 °C
l) Vapour density	no data available
m) Relative density	1,189 g/mL at 25 °C
n) Water solubility	soluble
o) Partition coefficient: n-octanol/water	log Pow: -0,48
p) Autoignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available

**9.2 Other safety information**

no data available

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## **10. STABILITY AND REACTIVITY**

### **10.1 Reactivity**

no data available

### **10.2 Chemical stability**

no data available

### **10.3 Possibility of hazardous reactions**

no data available

### **10.4 Conditions to avoid**

no data available

### **10.5 Incompatible materials**

Strong oxidizing agents

### **10.6 Hazardous decomposition products**

Other decomposition products - no data available

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## **11. TOXICOLOGICAL INFORMATION**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

LD50 Oral - mouse - 20.700 mg/kg

LC50 Inhalation - rat - > 5.000 mg/m3

LD50 Dermal - rabbit - 23,8 g/kg

#### **Skin corrosion/irritation**

Skin - rabbit - Skin irritation

#### **Serious eye damage/eye irritation**

Eyes - rabbit - Eye irritation

#### **Respiratory or skin sensitization**

no data available

#### **Germ cell mutagenicity**

no data available

#### **Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### **Reproductive toxicity**

no data available

#### **Specific target organ toxicity - single exposure**

no data available

#### **Specific target organ toxicity - repeated exposure**

no data available

#### **Aspiration hazard**

no data available

#### **Potential health effects**

##### **Inhalation**

May be harmful if inhaled. Causes respiratory tract irritation.

##### **Ingestion**

May be harmful if swallowed.

##### **Skin**

May be harmful if absorbed through skin. Causes skin irritation.

##### **Eyes**

Causes serious eye irritation.

#### **Signs and Symptoms of Exposure**

Nausea, Headache, Vomiting, Central nervous system depression, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## RTECS: FF9650000

## 12.1 Toxicity

Toxicity to fish	LC50 - <i>Leuciscus idus melanotus</i> - 5.300 mg/l - 96 h
	LC50 - <i>Leuciscus idus</i> (Golden orfe) - 5.300 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - <i>Daphnia magna</i> (Water flea) - > 500 mg/l - 48 h
	EC50 - <i>Daphnia magna</i> (Water flea) - > 500 mg/l - 48 h
Toxicity to algae	EC50 - <i>Desmodesmus subspicatus</i> (green algae) - > 500 mg/l - 72 h
	EC50 - <i>Desmodesmus subspicatus</i> (green algae) - > 500 mg/l - 72 h
Toxicity to bacteria	LC50 - Bacteria - > 10.000 mg/l - 72 h

**Biodegradability** Result: > 90 % - Readily biodegradable.

no data available

no data available

no data available

## no data available

### 13.1 Waste treatment methods

Offer surplus and non-recyclable solutions to a licensed disposal company.

Dispose of as unused product.

### 14.1 UN number

ADR/RID: - IMDG: - IATA: -

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

ADR/RID: - IMDG: - IATA: -

## ADR/RID: - IMDG: - IATA: -

## ADR/RID: no      IMDG Marine pollutant: no      IATA: no

no data available

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**15. REGULATORY INFORMATION**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
no data available**15.2 Chemical Safety Assessment**  
no data available

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