# SAFETY DATA SHEET
## DIPROPYLENE GLYCOL

Revision Date 01-Dec-2022 Revision Number 3

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**Product identifiers**

Product name : Dipropylene glycol (mixture of isomers) for synthesis

CAS-No. : 25265-71-8

**1.1 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : Chemical for synthesis

**1.2 Details of the supplier of the safety data sheet**

Company : Boxa Chemical Co.,Limited

Jiangjun Avenue 55#, Jiangning Area, Nanjing, China

**1.3 Emergency telephone**

Emergency Phone # : +86-15365006308

## SECTION 2: HAZARDS IDENTIFICATION

**2.1 Classification of the substance or mixture**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

**2.2 Label elements**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

**2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| | | |
|---|---|---|
| Formula | : | C6H14O3 |
| Molecular weight | : | 134,18 g/mol |
| CAS-No. | : | 25265-71-8 |

No components need to be disclosed according to the applicable regulations.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first-aid measures

**If inhaled**
After inhalation: fresh air.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Remove contact lenses.

**If swallowed**
After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Water Foam Carbon dioxide (CO2) Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

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

Carbon oxides
Combustible.
Vapors are heavier than air and may spread along floors.
Forms explosive mixtures with air on intense heating.
Development of hazardous combustion gases or vapours possible in the event of fire.

**5.3 Advice for firefighters**
In the event of fire, wear self-contained breathing apparatus.

**5.4 Further information**
Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Advice for non-emergency personnel: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

**6.2 Environmental precautions**
Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb® ). Dispose of properly. Clean up affected area.

**6.4 Reference to other sections**
For disposal see section 13.

## SECTION 7: HANDLING AND STORAGE

**7.1 Precautions for safe handling**
For precautions see section 2.2.

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

**Storage conditions**
Tightly closed.

Recommended storage temperature see product label.

**Storage class**
Storage class (TRGS 510): 10: Combustible liquids

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Ingredients with workplace control parameters**

**8.2 Exposure controls**

**Personal protective equipment**

**Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards . Safety glasses

**Skin protection**

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Full contact
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm Break through time: 480 min
Material tested:KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Splash contact Material:
Nitrile rubber
Minimum layer thickness: 0,11 mm Break through time: 480 min
Material tested:KCL 741 Dermatril® L

**Respiratory protection**

Not required; except in case of aerosol formation.

**Control of environmental exposure**

Do not let product enter drains.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**9.1 Information on basic physical and chemical properties**

| | |
|---|---|
| a) Appearance | Form: liquid<br>Color: colorless |
| b) Odor | odorless |
| c) Odor Threshold | No data available |
| d) pH | No data available |
| e) Melting | point/freezing point<br>Melting point/range: < -20 °C at 101,3 hPa |
| f) Initial boiling point and boiling range | 227 °C at 0,98 hPa |

| | |
|---|---|
| g) Flash point | 130 °C - closed cup |
| h) Evaporation rate | No data available |
| i) Flammability (solid, gas) | No data available |
| j) Upper/lower flammability or explosive limits | No data available |
| k) Vapor pressure | 0,0 hPa at 25 °C |
| l) Vapor density | 5,37 |
| m) Density<br>Relative density | 1,023 g/cm3<br>1,02 at 20 °C |
| n) Water solubility | at 20 °C soluble |
| o) Partition coefficient: n-octanol/water | log Pow: -0,46 at 21,7 °C |
| p) Autoignition temperature | 332 °C<br>at 98,96 - 100,18 hPa |
| q) Decomposition temperature | No data available |
| r) Viscosity | Viscosity, kinematic: No data available<br>Viscosity, dynamic: No data available |
| s) Explosive properties | No data available |
| t) Oxidizing properties | none |

**9.2 Other safety information**

| | |
|---|---|
| Surface tension | 71,4 mN/m at 1,01 at 22 °C |
| Relative vapor density | 5,37 |

## SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity**

Forms explosive mixtures with air on intense heating.
A range from approx. 15 Kelvin below the flash point is to be rated as critical.

**10.2 Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) .

**10.3 Possibility of hazardous reactions**

Violent reactions possible with:
Oxidizing agents

**10.4 Conditions to avoid**
Strong heating.

**10.5 Incompatible materials**
No data available

**10.6 Hazardous decomposition products**
In the event of fire: see section 5

## SECTION 11: TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - male and female - > 5.000 mg/kg
LC50 Inhalation - Rat - male and female - 4 h - > 2,34 mg/l

LD50 Dermal - Rabbit - > 5.010 mg/kg

**Skin corrosion/irritation**
Skin - Rabbit
Result: No skin irritation

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: No eye irritation

**Respiratory or skin sensitization**
Buehler Test - Guinea pig
Did not cause sensitization on laboratory animals.

**Germ cell mutagenicity**
Test Type: in vitro test
Test system: lymphocyte
Metabolic activation: with and without metabolic activation
Result: negative

Test Type: In vivo micronucleus test
Species: Rat

Application Route: Oral
Method: Mutagenicity (micronucleus test)

**Carcinogenicity**
No data available

**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

### 11.2 Additional Information

Repeated dose toxicity - Rat - male - Oral - NOAEL (No observed adverse effect level) - 470 mg/kg

Repeated dose toxicity - Rat - female - Oral - NOAEL (No observed adverse effect level) - 530 mg/kg

prolonged or repeated exposure can cause:, Central nervous system depression, Nausea, Headache, Vomiting

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Carassius auratus (goldfish) - > 5.000 mg/l - 24 h |
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202 |
| Toxicity to algae | EC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201) |

### 12.2 Persistence and degradability

Biodegradability: aerobic - Exposure time 28 d
Result: 84,4 % - Readily biodegradable.
(OECD Test Guideline 301F)

### 12.3 Bioaccumulative potential

Bioaccumulation: Cyprinus carpio (Carp) - 3 mg/l(oxydipropanol)

Bioconcentration factor (BCF): 0,3 - 4,6
(OECD Test Guideline 305C)

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties

No data available

### 12.7 Other adverse effects

No data available

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**

Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

## SECTION 14: TRANSPORT INFORMATION

**14.1 UN number**

ADR/RID: - IMDG: - IATA: -

**14.2 UN proper shipping name**

ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

**14.3 Transport hazard class(es)**

ADR/RID: - IMDG: - IATA: -

**14.4 Packaging group**

ADR/RID: - IMDG: - IATA: -

**14.5 Environmental hazards**

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

**14.6 Special precautions for user**

**Further information**

Not classified as dangerous in the meaning of transport regulations.

## SECTION 15: REGULATORY INFORMATION

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

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

**15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

## SECTION 16: OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.