

SHANGHAI ORIENT CHEMICAL CO.,LTD

ADD:ROOM 401,403 HAIBO BUILDING, NO. 3615 GONGHEXIN ROAD,JING'AN DISTRICT, SHANGHAI,CHINA, 200435

SAFETY DATA SHEET

Revision
Date:9/27/2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Propylene carbonate
CAS-No. : 108-32-7

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

Identified uses : Laboratory chemicals, Synthesis of substances,Solvents

1.3 Details of the manufacturer of the safety data sheet

Company name: Shanghai Orient Chemical Co., Ltd
Street/POB-No.: Jing'an Dist.,Shanghai,China
Telephone: +86-21-59969669
Telefax: +86-21-59969200

1.4 Emergency telephone number

Emergency Phone #: +86-21-59969669

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Eye irritation (Category 2A), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

H319

Causes serious eye irritation.

Precautionary statement(s)

P264

Wash skin thoroughly after handling.

P280

Wear eye protection/ face protection.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes.

P337 + P313

Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3:Composition/information on ingredients

3.1 Substances

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

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Formula : C4H6O3
Molecular weight : 102.09 g/mol
CAS-No. : 108-32-7
EC-No. : 203-572- 1
Index-No. : 607- 194-00- 1

Component	Classification	Concentration
Propylene carbonate		
	Eye Irrit. 2A; H3 19	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 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. Move out of dangerous area.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 1.1

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**

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

5.2 Special hazards arising from the substance or mixture

Carbon oxides
Combustible liquid.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures

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- 6.1 Personal precautions, protective equipment and emergency procedures** Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. 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**
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.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2.
- 7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.

Moisture sensitive.
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

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

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.

Full contact

Material: Nature latex/chloroprene
Minimum layer thickness: 0.6 mm Break through time: 480 min

Splash contact

Material: Nature latex/chloroprene
Minimum layer thickness: 0.6 mm Break through time: 480 min

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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).

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, clear
Colour: colourless |
| b) Odour | fruity |
| c) Odour Threshold | No data available |
| d) pH | 7 at 200 g/l at 20 °C (68 °F) |
| e) Melting point/ freezing point | Melting point/range: -55 °C (-67 °F) - lit. 240 °C |
| f) Initial boiling point and boiling range | 464 °F - lit. |
| g) Flash point | 116 °C (241 °F) - closed cup - DIN 51758 |
| 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 | 0.06 hPa at 25 °C (77 °F) |
| l) Vapour density | No data available |
| m) Relative density | 1.189 g/mL at 25 °C (77 °F) |
| n) Water solubility | 175 g/l at 25 °C (77 °F) at 1,013 hPa - soluble |
| o) Partition coefficient : n-octanol/ water | log Pow: -0.41 No |
| p) Auto-ignition temperature | data available |
| q) Decomposition temperature | 350 °C (662 °F), 240 kJ/kg - |

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- | | | |
|----|----------------------|-------------------|
| r) | Viscosity | No data available |
| s) | Explosive properties | Not explosive |
| t) | Oxidizing properties | No data available |

9.2 Other safety information

Dissociation constant 3.92 at 20 °C (68 °F)

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Acids, Bases Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11 : Toxicological information

11.1 Information on toxicological effects Acute toxicity

No data available

Inhalation: No data available

LD50 Dermal - Rabbit - > 2,000 mg/kg (OECD Test Guideline 402)

LD50 Dermal - Rabbit - > 20,000 mg/kg Remarks:

(IUCLID)

No data available

Skin corrosion/ irritation

Skin - Rabbit

Result: No skin irritation (OECD

Test Guideline 404)

Serious eye damage/ eye irritation

Eyes - Rabbit Result:

irritating

(OECD Test Guideline 405)

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

unscheduled DNA synthesis assay rat

hepatocytes

Result: negative

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Ames test

S. typhimurium

Result: negative

OECD Test Guideline 474

Mouse - male and female - Bone marrow Result:

negative

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.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

No data available

Additional Information

RTECS: FF9650000

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

SECTION 12 : Ecological information**12.1 Toxicity**

Toxicity to fish	semi-static test LC50 - Cyprinus carpio (Carp) - > 1,000 mg/l - 96 h (OECD Test Guideline 203)
	NOEC - Leuciscus idus (Golden orfe) - 2,200 mg/l - 96 h (DIN 38412)
	Remarks: (IUCLID)
	LC50 - Leuciscus idus (Golden orfe) - ca. 5,300 mg/l - 96 h (DIN 38412)
	Remarks: (IUCLID)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 1,000 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	ErC50 - Desmodesmus subspicatus (green algae) - > 900 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	EC10 - Pseudomonas putida - 7,400 mg/l - 16 h (DIN 38 412 Part 8)

12.2 Persistence and degradability

Biodegradability Result: > 90 % - Readily biodegradable.

12.3 Bioaccumulative potential

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No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/ vPvB assessment not available as chemical safety assessment not required/ not conducted

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information SARA 302

Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

SECTION 16: Other information

Further 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. We, shall not be held liable for any damage resulting from handling or from contact with the above product.