## PROPYLENE CARBONATE  
**CAS No 108-32-7**

### MATERIAL SAFETY DATA SHEET  
**SDS/MSDS**

### 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, Industrial & for professional use only.

#### 1.3 Details of the supplier of the safety data sheet

- **Company**: Central Drug House (P) Ltd  
  7/28 Vardaan House  
  New Delhi -110002  
  INDIA
- **Telephone**: +91 11 49404040
- **Email**: care@cdhfinechemical.com

#### 1.4 Emergency telephone number

- **Emergency Phone #**: +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**

- **Eye irritation (Category 2)**, H319

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

#### 2.2 Label elements

**Labelling according Regulation (EC) No 1272/2008**

- **Pictogram**: Warning

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

<table>
<thead>
<tr>
<th><strong>Formula</strong></th>
<th><strong>C₄H₆O₃</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Molecular weight</strong></td>
<td>102.09 g/mol</td>
</tr>
<tr>
<td><strong>CAS-No.</strong></td>
<td>108-32-7</td>
</tr>
<tr>
<td><strong>EC-No.</strong></td>
<td>203-572-1</td>
</tr>
<tr>
<td><strong>Index-No.</strong></td>
<td>607-194-00-1</td>
</tr>
</tbody>
</table>

**Hazardous ingredients according to Regulation (EC) No 1272/2008**  

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene carbonate</td>
<td>Eye Irrit. 2; H319</td>
<td>&lt;= 100 %</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>108-32-7</td>
<td></td>
</tr>
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</tbody>
</table>

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.

**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 11

4.3 **Indication of any immediate medical attention and special treatment needed**  
No data available

**SECTION 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 firefighting if necessary.

5.4 **Further information**  
No data available
SECTION 6: Accidental release measures

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

Moisture sensitive.
Storage class (TRGS 510): 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

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.

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 (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering 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
   like fruit

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
   116 °C - 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

l) Vapour density
   No data available

m) Relative density
   1.189 g/mL at 25 °C

n) Water solubility
   175 g/l at 25 °C at 1,013 hPa - soluble

o) Partition coefficient: n-octanol/water
   log Pow: -0.409

p) Auto-ignition temperature
   No data available

q) Decomposition temperature
   350 °C, 240 KJ/kg -

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

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
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
LD50 Oral - Rat - > 5,000 mg/kg (Propylene carbonate)
(OECD Test Guideline 401)
LD50 Dermal - Rabbit - > 2,000 mg/kg (Propylene carbonate)
(OECD Test Guideline 402)

Skin corrosion/irritation
Skin - Rabbit (Propylene carbonate)
Result: No skin irritation
(Draize Test)

Serious eye damage/eye irritation
Eyes - Rabbit (Propylene carbonate)
Result: Irritating to eyes.
(OECD Test Guideline 405)

Respiratory or skin sensitisation
Patch test on human volunteers did not demonstrate sensitisation properties. (Propylene carbonate)

Germ cell mutagenicity
Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Animal testing did not show any mutagenic effects. (Propylene carbonate)

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
Did not show teratogenic effects in animal experiments. (Propylene carbonate)
Animal testing did not show any effects on fertility. (Propylene carbonate)

Specific target organ toxicity - single exposure
The substance or mixture is not classified as specific target organ toxicant, single exposure. (Propylene carbonate)

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 (Propylene carbonate)

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. (Propylene carbonate)

SECTION 12: Ecological information

12.1 Toxicity
Toxicity to fish semi-static test LC50 - Cyprinus carpio (Carp) - > 1,000 mg/l - 96 h (Propylene carbonate)
Toxicity to daphnia and other aquatic invertebrates
static test EC50 - Daphnia magna (Water flea) - > 1,000 mg/l - 48 h(Propylene carbonate)
(OECD Test Guideline 202)

Toxicity to algae
EC50 - Desmodesmus subspicatus (green algae) - > 900 mg/l - 72 h(Propylene carbonate)
(OECD Test Guideline 201)

Toxicity to bacteria
EC10 - Pseudomonas putida - 7,400 mg/l - 16 h(Propylene carbonate)
(DIN 38 412 Part 8)

12.2 Persistence and degradability
Biodegradability Result: > 90 % - Readily biodegradable

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available(Propylene carbonate)

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 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.

Contaminated packaging
Dispose of as unused product.

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
No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety datasheet 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

Full text of H-Statements referred to under sections 2 and 3.
H319 Causes serious eye irritation.

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. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.