

SECTION 1: Identification

1.1. Identification

Product form	: Substance
Trade name	: Propylene Carbonate
Chemical name	: 4-Methyl-1,3-dioxolan-2-one
CAS No	: 108-32-7
Product code	: 3581, 3584
Formula	: C4H6O3
Synonyms	: Cyclic propylene carbonate, Carbonic acid propylene ester, Cyclic 1,2-propylene carbonate, Propylene glycol cyclic carbonate; 1,2-Propanediol carbonate; 4-Methyl-2-oxo-1,3-dioxolane

1.2. Recommended use and restrictions on use

Recommended use	: Industrial use
Restrictions on use	: No additional information available

1.3. Supplier

Special Materials Company
70 West 40th Street, 2nd Floor
New York, NY 10018
Ph: (646) 366-0400
Fax: (646) 366-0595

1.4. Emergency telephone number

Emergency number : CHEMTREC - (800) 424-9300 | Outside the US: 011 (703) 527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Serious eye damage/eye irritation Category 2A H319 Causes serious eye irritation

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H319 - Causes serious eye irritation

Precautionary statements (GHS-US) :

P264 - Wash hands, forearms and face thoroughly after handling
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical advice/attention

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type : Mono-constituent

Propylene Carbonate

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	GHS-US classification
Propylene Carbonate	(CAS No) 108-32-7	99.5 - 100	Eye Irrit. 2A, H319

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin with plenty of water.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/injuries after eye contact : Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

- Reactivity : No data available.

5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Propylene Carbonate

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Propylene Carbonate (108-32-7)

Not applicable

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colorless
Odor	: slight
Odor threshold	: No data available
pH	: No data available
Melting point	: -48.9 °C
Freezing point	: No data available
Boiling point	: 242.2 °C
Flash point	: 135 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: 0.03 mm Hg @ 20°C
Relative vapor density at 20 °C	: No data available
Relative density	: 1.195 - 1.205
Molecular mass	: 102.09 g/mol
Solubility	: Water: 240 g/l
Log Pow	: No data available
Auto-ignition temperature	: 430 °C
Decomposition temperature	: 300 °C
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: 1.7 - 32.5 vol %
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

VOC content : Not regulated

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

Propylene Carbonate

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No additional information available.

10.4. Conditions to avoid

No additional information available.

10.5. Incompatible materials

Strong bases. Strong acids. Strong oxidizers.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Propylene Carbonate (108-32-7)	
LD50 oral rat	20700 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5000 µg/l

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Propylene Carbonate (108-32-7)	
IARC group	Not listed
National Toxicology Program (NTP) Status	Not listed

Reproductive toxicity : Not classified
Specific target organ toxicity – single exposure : Not classified
Specific target organ toxicity – repeated exposure : Not classified
Aspiration hazard : Not classified
Viscosity, kinematic : No data available
Symptoms/injuries after eye contact : Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - air : Not dangerous for the ozone layer.

Propylene Carbonate (108-32-7)	
LC50 fish 1	> 1000 mg/l <i>Cyprinus carpio</i> ; 96 h
EC50 <i>Daphnia</i> 1	> 1000 ml/l 48 h

12.2. Persistence and degradability

Propylene Carbonate (108-32-7)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

Propylene Carbonate

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

TDG

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

Propylene Carbonate (108-32-7)	
EPA TSCA Regulatory Flag	All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory
CERCLA RQ	Not listed
RQ (Reportable quantity, section 304 of EPA's List of Lists)	Not listed
SARA Section 302 Threshold Planning Quantity (TPQ)	Not listed
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 Emission Reporting	None to our knowledge

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

Propylene Carbonate (108-32-7)	
U.S. - California - Proposition 65 - Other information	Not listed

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases:

H319	Causes serious eye irritation
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Propylene Carbonate

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

HMIS III Rating

Health	: 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability	: 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal Protection	: C C - Safety glasses, Gloves, Synthetic apron

SDS US (GHS HazCom 2012)

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.