

## Propylene Carbonate

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	Propylene Carbonate
<b>Other Means of Identification</b>	1,2-Propanediol carbonate, Cyclic methylene carbonate
<b>Product Code(s)</b>	PR4810
<b>Product Family</b>	Organic solution
<b>Recommended Use</b>	Laboratory.
<b>Restrictions on Use</b>	Not for food, drug, pesticide or biocidal product use.
<b>Supplier Identifier</b>	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
<b>Emergency Phone No.</b>	CANUTEC CANADA, 613-996-6666, 24 Hours
<b>SDS No.</b>	1436

### SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

#### Classification

Eye irritation - Category 2A

#### Label Elements



Signal Word:  
Warning

Hazard Statement(s):  
Causes serious eye irritation.

#### Precautionary Statement(s):

##### Prevention:

Wash hands and skin thoroughly after handling.

Wear eye protection/face protection.

##### Response:

IF IN EYES: 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.

##### Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

#### Other Hazards

---

Product Identifier: Propylene Carbonate - Ver. 2

Date of Preparation:

Date of Last Revision: March 06, 2018

Page 01 of 06

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Propylene carbonate	108-32-7	> 95	1,2-Propanediol carbonate, Cyclic methylethylene carbonate	

### SECTION 4. FIRST-AID MEASURES

#### First-aid Measures

##### Inhalation

Remove source of exposure or move to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor. Seek immediate medical attention.

##### Skin Contact

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. If skin irritation occurs, get medical advice or attention.

##### Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Contact physician immediately.

##### Ingestion

Do not induce vomiting. Immediately call a Poison Centre or doctor.

##### First-aid Comments

Provide general supportive measures (comfort, warmth, rest). Do not leave the victim unattended.

#### Most Important Symptoms and Effects, Acute and Delayed

None known.

#### Immediate Medical Attention and Special Treatment

##### Special Instructions

General advice, consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

### SECTION 5. FIRE-FIGHTING MEASURES

#### Extinguishing Media

##### Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

##### Unsuitable Extinguishing Media

None known.

#### Specific Hazards Arising from the Product

Heating increases the release of toxic vapour.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide.

#### Special Protective Equipment and Precautions for Fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

Product Identifier: Propylene Carbonate - Ver. 2

Date of Preparation:

Date of Last Revision: March 06, 2018

Page 02 of 06

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials.

### Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

### Methods and Materials for Containment and Cleaning Up

Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Wear personal protective equipment to avoid direct contact with this chemical. Only use where there is adequate ventilation. Prevent accidental contact with incompatible chemicals.

### Conditions for Safe Storage

Store in an area that is: cool, dry, well-ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity).

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Propylene carbonate	Not established		Not established			

### TLV Comments:

NOTE: In many jurisdictions, exposure limits are similar to the ACGIH TLVs. Since a TLV has not been established for this substance, appropriate government agencies in each jurisdiction should be consulted to determine which regulations apply.

### Appropriate Engineering Controls

Provide eyewash and safety shower if contact or splash hazard exists. Ensure adequate ventilation, especially in confined areas.

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

#### Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

#### Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

**Appearance** Colourless liquefied gas.

**Odour** Odourless

Product Identifier: Propylene Carbonate - Ver. 2

Date of Preparation:

Date of Last Revision: March 06, 2018

Page 03 of 06

<b>Odour Threshold</b>	Not applicable
<b>pH</b>	6.5 - 7.5 (10% solution)
<b>Melting Point/Freezing Point</b>	-48.8 °C (-55.8 °F) (melting); -48.8 °C (-55.8 °F) (freezing)
<b>Initial Boiling Point/Range</b>	241.7 °C (467.1 °F)
<b>Flash Point</b>	130 °C (266 °F)
<b>Evaporation Rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not applicable
<b>Upper/Lower Flammability or Explosive Limit</b>	21% (upper); 4.7% (lower)
<b>Vapour Pressure</b>	0.006 kPa (0.045 mm Hg) at 25 °C
<b>Vapour Density (air = 1)</b>	3.52 (calculated)
<b>Relative Density (water = 1)</b>	1.206 at 20 °C
<b>Solubility</b>	Very soluble in water; Highly soluble in alcohols (e.g. ethanol).
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	-0.41
<b>Auto-ignition Temperature</b>	430 °C (806 °F)
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not available (kinematic); 2.76 mPa.s at 20 °C (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	Liquid
<b>Molecular Weight</b>	102.09

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

No data available.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

### Conditions to Avoid

Incompatible materials. Excess heat.

### Incompatible Materials

Strong oxidizing agents (e.g. perchloric acid), strong reducing agents (e.g. hydrides), strong acids (e.g. hydrochloric acid), strong bases (e.g. sodium hydroxide), water.

### Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

### Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Propylene carbonate	> 5000 mg/m <sup>3</sup> (rat)	29100 mg/kg (rat)	> 5000 mg/kg (rabbit)

### Skin Corrosion/Irritation

Animal tests show very mild irritation.

Product Identifier: Propylene Carbonate - Ver. 2

Date of Preparation:

Date of Last Revision: March 06, 2018

Page 04 of 06

**Serious Eye Damage/Irritation**

Causes eye irritation.

**STOT (Specific Target Organ Toxicity) - Single Exposure****Inhalation**

No information was located.

**Ingestion**

No information was located.

**Aspiration Hazard**

No information was located.

**STOT (Specific Target Organ Toxicity) - Repeated Exposure**

No information was located.

**Respiratory and/or Skin Sensitization**

No information was located for respiratory sensitization. Not known to be a skin sensitizer.

**Carcinogenicity**

Chemical Name	IARC	ACGIH®	NTP	OSHA
Propylene carbonate	Not Listed	Not designated	Not Listed	Not Listed

**Reproductive Toxicity****Development of Offspring**

No information was located.

**Sexual Function and Fertility**

No information was located.

**Effects on or via Lactation**

No information was located.

**Germ Cell Mutagenicity**

No information was located.

**Interactive Effects**

No information was located.

**SECTION 12. ECOLOGICAL INFORMATION**

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal Methods**

Dispose of contents and container in accordance with local, regional, national and international regulations.

**SECTION 14. TRANSPORT INFORMATION**

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations. Not regulated under IATA Regulations.

**Special Precautions** Not applicable

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**SECTION 15. REGULATORY INFORMATION****Safety, Health and Environmental Regulations**

Product Identifier: Propylene Carbonate - Ver. 2

Date of Preparation:

Date of Last Revision: March 06, 2018

**Canada**

**Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)**

Listed on the DSL.

**USA**

**Toxic Substances Control Act (TSCA) Section 8(b)**

Listed on the TSCA Inventory.

**SECTION 16. OTHER INFORMATION**

<b>NFPA Rating</b>	<b>Health - 1</b>	<b>Flammability - 1</b>	<b>Instability - 1</b>
<b>SDS Prepared By</b>	Alphachem Limited		
<b>Phone No.</b>	(905)-821-2995		
<b>Date of Last Revision</b>	March 06, 2018		
<b>References</b>	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).		
<b>Disclaimer</b>	This document is offered only as a guide in the safe handling of the above product, and has been prepared from the best information currently available. It is not intended to be all-inclusive and the conditions of use may involve other additional considerations. Since Alphachem Limited cannot anticipate or control the conditions under which the product may be used, it will not be liable for any claims, damages or losses which may result from the use or reliance on any information herein.		