



Safety Data Sheet

Section 01 - Identification

| | |
|--|--|
| Product Identifier | Propylene Glycol Propylene Glycol, 99.5% Min. Tech Grade Propylene Glycol 99.8% (meets USP Standard) |
| Other Means of Identification | 1, 2-Dihydroxypropane, 1,2-Propanediol |
| Product Use and Restrictions on Use | Not available |
| Initial Supplier Identifier | ClearTech Industries Inc. 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7 |
| Prepared By | ClearTech Industries Inc. Technical Writer Phone: 1 (800) 387-7503 |
| 24-Hour Emergency Phone | Phone: 1 (306) 664 – 2522 |

Section 02 - Hazard Identification

GHS-Classification

This product has been assessed in accordance with the Hazardous Products Regulations and is not classified as a hazardous substance or mixture.

Section 03 - Composition / Information on Ingredients

| Chemical Name | CAS Number | Weight % | Unique Identifiers |
|------------------|------------|----------|--------------------|
| Propylene Glycol | 57-55-6 | >99 | |

Section 04 - First Aid Measures

| | |
|----------------------------------|--|
| Inhalation | If symptoms are experienced, remove source of contamination or move victim to fresh air. Obtain medical advice. |
| Skin Contact / Absorption | No health effects expected. Flush with lukewarm, gently flowing water for 5 minutes. If irritation persists, seek medical attention. |
| Eye Contact | If irritation occurs, flush the contaminated eye(s) with lukewarm, gently flowing water for 30 minutes. If irritation persists, obtain medical advice. |
| Ingestion | Normally non-toxic. If irritation or discomfort occurs, obtain medical advice. |
| Additional Information | Symptoms may be delayed. All first aid procedures should be periodically reviewed by a doctor familiar with the material and its conditions of use in the workplace. |

Section 05 - Fire Fighting Measures

Suitable Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Unsuitable Extinguishing Media Not Available

Specific Hazards Arising From the Chemical During a fire carbon oxides may be emitted

Special Protective Equipment and Precautions for Fire-Fighters Wear NIOSH-approved self-contained breathing apparatus and protective clothing.

Further Information Not Available

Section 06 - Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so.

Environmental Precautions Prevent material from entering drains.

Methods and Materials for Containment and Cleaning Up Avoid generating dust. Use vacuum equipped with HEPA filter(s). Alternatively, dampen spilled material with water. Shovel into clean, dry, labelled containers. Cover containers. Flush area with water.

Section 07 - Handling and Storage

Precautions for Safe Handling This material is essentially non-hazardous. Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure. Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for Safe Storage Store in a cool, dry place. Keep container tightly closed, and away from incompatible materials.

Incompatibilities Strong oxidizers, acids

Section 08 - Exposure Controls and Personal Protection

Exposure Limit(s)

| Component | Regulation | Type of Listing | Value |
|------------------|-----------------|-----------------|-------|
| Propylene Glycol | Not Established | | |

Engineering Control(s)

Ventilation Requirements Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.

Other Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

Protective Equipment

Eyes/Face No specific requirement, but it is good practice to wear chemical safety goggles.

Hand Protection No specific requirement, but it is good practice to prevent skin contact.

| | |
|---------------------------------|---|
| Skin and Body Protection | No specific requirement, but it is good practice to prevent skin contact. |
| | No special footwear is required other than what is mandated at place of work. |
| Respiratory Protection | Respiratory protection is not normally required. If use creates dust formations, then a NIOSH-approved respirator with a dust cartridge is recommended. |
| Thermal Hazards | Not Available |

Section 09 - Physical and Chemical Properties

Appearance

| | |
|------------------------|----------------|
| Physical State | Viscous Liquid |
| Colour | Clear |
| Odour | Odourless |
| Odour Threshold | Not Applicable |

Property

| | |
|--|--|
| pH | Not Available |
| Melting Point/Freezing Point | -60°C |
| Initial Boiling Point and Boiling Range | 187°C |
| Flash Point | 99°C |
| Evaporation Rate | Not Available |
| Flammability | Not Applicable |
| Upper Flammable Limit | 12.6% |
| Lower Flammable Limit | 2.6% |
| Vapour Pressure (mm Hg, 20°C) | 0.13 mbar @ 20°C |
| Vapour Density (Air=1) | 2.62 |
| Solubility(ies) | Miscible in water |
| Partition Coefficient: n-octanol/water | Not Available |
| Auto-ignition Temperature | >400°C |
| Decomposition Temperature | Not Available |
| Viscosity | 0.581 cP @ 20°C |
| Explosive Properties | Not Available |
| Specific Gravity (Water=1) | 1.033-1.037 g/mL @ 20°C |
| % Volatiles by Volume | 0 |
| Formula | C ₃ H ₈ O ₂ |

Molecular Weight 76.09

Section 10 - Stability and Reactivity

| | |
|------------------------------------|---|
| Reactivity | Not Available. |
| Stability | Normally stable. |
| Possibility of Hazardous Reactions | None known. |
| Conditions to Avoid | Not Available |
| Incompatible Materials | Stong oxidizers and strong acids |
| Hazardous Decomposition Products | Cabon oxides will be released in a fire |

Section 11 - Toxicological Information

Acute Toxicity

| Component | Oral LD ₅₀ | Dermal LD ₅₀ | Inhalation LC ₅₀ |
|------------------|-----------------------|-------------------------|-----------------------------|
| Propylene Glycol | 21 – 33.7 g/kg (rat) | 20.8 g/kg (rabbit) | Not Available |

Chronic Toxicity – Carcinogenicity

| Component | IARC |
|------------------|--|
| Propylene Glycol | Not considered to be carcinogenic by NTP, IARC, ACGIH and OSHA |

| | |
|--|--|
| Skin Corrosion/Irritation | Some studies have shown propylene glycol to be a mild irritant after a long duration of exposure |
| Ingestion | Non-toxic. Over-exposure may cause high blood pressure, disagreeable taste, nausea and vomiting. |
| Inhalation | Not toxic through inhalation, over-exposure results in slight irritation of nose and sneezing. |
| Serious Eye Damage/Irritation | Propylene glycol is a non-irritant to very mild irritant. |
| Respiratory or Skin Sensitization | Propylene glycol is not a skin sensitizer. |
| Germ Cell Mutagenicity | Propylene glycol is not known to be mutagenic. |
| Reproductive Toxicity | Propylene glycol is not known to cause reproductive toxicity. |
| STOT-Single Exposure | Mild irritant to upper respiratory tract and mucous membranes. |
| STOT-Repeated Exposure | Not Available |
| Aspiration Hazard | Not Available |
| Synergistic Materials | Not Available |

Section 12 – Ecological Information

Ecotoxicity

| Component | Toxicity to Algae | Toxicity to Fish | Toxicity to Daphnia and Other Aquatic Invertebrates |
|-----------|-------------------|------------------|---|
|-----------|-------------------|------------------|---|

Propylene Glycol

EC₅₀(Pseudokirchneriella
subcpitata, 96d):
19,000 mg/L

LC₅₀(Pimephales promelas,
96hr): > 51,400 mg/L

EC₅₀(Daphnia magna, 48hr):
>10,000 mg/L

| | |
|------------------------------|---|
| Biodegradability | The product itself and products of degradation are not toxic. |
| Bioaccumulation | Not Available |
| Mobility | Not Available |
| Other Adverse Effects | Not Available |

Section 13 – Disposal Considerations

| | |
|--|---|
| Waste From Residues/Unused Products | Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act. |
| Contaminated Packaging | Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act. |

Section 14 – Transport Information

| | |
|-----------------------------------|--|
| UN Number | Not Regulated |
| UN Proper Shipping Name | Not Regulated |
| Transport Hazard Class(es) | Not Regulated |
| Packaging Group | Not Regulated |
| Environmental Hazards | Not listed as a marine pollutant under Canadian TDG Regulations, schedule III. |
| Special Precautions | Not Available |
| Transport in Bulk | Not Available |

TDG

Other Secure containers (full and/or empty) with suitable hold down devices during shipment and ensure all caps, valves, or closures are secured in the closed position.

TDG PRODUCT CLASSIFICATION: This product has been classified on the preparation date specified at section 14 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS / SDS.

Section 15 – Regulatory Information

NOTE: THE PRODUCT LISTED ON THIS SDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS SDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

Section 16 – Other Information

| | |
|-------------------------|-------------------|
| Preparation Date | April 20, 2017 |
| Revision Date | February 28, 2019 |

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no

guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

Attention: Receiver of the chemical goods / SDS coordinator

As part of our commitment to the Canadian Association of Chemical Distributors (CACD) Responsible Distribution[®] initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

References:

- 1) CHEMINFO
- 2) eChemPortal
- 3) TOXNET
- 4) Transportation of Dangerous Goods Canada
- 5) HSDB
- 6) ECHA

ClearTech Industries Inc. - Locations

Corporate Head Office: 1500 Quebec Avenue, Saskatoon, SK, S7K 1V7

Phone: 1(306) 664 – 2522

Fax: 1(888) 281-8109

www.cleartech.ca

24 Hour Emergency Number - All Locations – 1(306) 664-2522