



Safety Data Sheet

Section 01 - Product And Company Identification

Product Identifier	Propylene Glycol, Inhibited 100
Other Means of Identification	Inhibited Propylene Glycol
Product Use and Restrictions on Use	Heat transfer fluid, antifreeze
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	>95	

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 Clean up spill with non-reactive absorbent material and place in suitable, labelled containers for proper disposal.

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	103°C
Evaporation Rate	0.01 relative to butyl acetate
Flammability	Flammable
Upper Flammable Limit	Not Applicable
Lower Flammable Limit	Not Applicable
Vapour Pressure (mm Hg, 20°C)	Very low.
Vapour Density (Air=1)	.13 mm Hg @ 25°C
Solubility(ies)	Very soluble (36g/100g water at 20°C) Soluble in glycerol and aqueous ammonia; moderately soluble in methanol, ethylene glycol and formic acid; very slightly soluble in ethanol.
Partition Coefficient: n-octanol/water	Log P _{OW} = -0.46 (estimated)
Auto-ignition Temperature	Not Applicable
Decomposition Temperature	Not Available
Viscosity	0.581 cP @ 20°C
Explosive Properties	Not Available
Specific Gravity (Water=1)	1.036 @ 20°C
% Volatiles by Volume	0

Formula C₃H₈O₂

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 Strong oxidizers and reducing agents, strong acids

Hazardous Decomposition Products Carbon 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	EC ₅₀ (Selenastrum capricornutum, 145d): 18,100 mg/L	LC ₅₀ (Lepomis macrochirus, 96hr): > 10,000 mg/L	EC ₅₀ (Daphnia magna, 48hr): >1000 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
<u>TDG</u>	
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	2017 April 20
Revision Date	July 9, 2018

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