

# Safety Data Sheet

### Section 01 - Identification

Product Identifier Propylene Glycol 50%

Other Means of Identification 1, 2-Dihydroxypropane, 1,2-Proanediol

**Product Use and Restrictions on** 

Use

Heat transfer fluid

Initial Supplier Identifier ClearTech Industries Inc.

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#### 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 NameCAS NumberWeight %Unique Identifiers1,2-Propylene Glycol57-55-649-51%

#### **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

Chemical

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

**Precautions for Fire-Fighters** 

**Special Protective Equipment and** Wear NIOSH-approved self-contained breathing apparatus and protective clothing.

**Further Information** Not Available

### Section 06 - Accidental Release Measures

Personal Precautions / Protective Wear appropriate personal protective equipment. Ventilate area. Only enter area with

**Equipment / Emergency** 

**Procedures** 

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.

Emergency shower and eyewash must be available and tested in accordance with Other

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 Not Available

**Initial Boiling Point and Boiling** 

Range

Not Available

Flash Point Not Available

**Evaporation Rate** Not Available

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) Miscible in water

Partition Coefficient: n-

octanol/water

Not Available

Auto-ignition Temperature Not Applicable

**Decomposition Temperature** Not Available

Viscosity Not Available

**Explosive Properties** Not Available

Specific Gravity (Water=1) 1.042 @ 20°C

% Volatiles by Volume 0

Formula C<sub>3</sub>H<sub>8</sub>O<sub>2</sub>

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**

ComponentOral  $LD_{50}$ Dermal  $LD_{50}$ Inhalation  $LC_{50}$ Propylene Glycol21 - 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

Propylene Glycol EC<sub>50</sub>(Pseudokirchnerie

EC<sub>50</sub>(Pseudokirchneriella subcpitata, 96d):

**Toxicity to Algae** 

19,000 mg/L

**Toxicity to Fish** 

LC<sub>50</sub>(Pimephales promelas, 96hr): > 51,400 mg/L

Toxicity to Daphnia and Other Aquatic Invertebrates EC<sub>50</sub>(Daphnia magna, 48hr):

>10,000 mg/L

**Biodegradability** The product itself and products of degradation are not toxic.

Not Available **Bioaccumulation** 

Mobility Miscible in water.

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.

Dispose in accordance with all federal, provincial, and/or local regulations including the Contaminated Packaging

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 devises 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** June 19, 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 (B) 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**

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