



# Safety Data Sheet

---

## Section 01 - Identification

---

|  |   |
|--|---|
| <b>Product Identifier</b>                  | POLYPRO   |
| <b>Other Means of Identification</b>       | None  |
| <b>Product Use and Restrictions on Use</b> | Product for use as a disinfectant and algacide for use in agricultural reservoirs   |
| <b>Initial Supplier Identifier</b>         | ClearTech Industries Inc.<br>1500 Quebec Avenue<br>Saskatoon, SK. Canada<br>S7K 1V7 |
| <b>Prepared By</b>                         | ClearTech Industries Inc. Technical Writer<br>Phone: 1 (800) 387-7503               |
| <b>24-Hour Emergency Phone</b>             | Phone: 1 (306) 664 – 2522   |

---

## Section 02 - Hazard Identification

---

### GHS-Classification

|                                      |             |
|--------------------------------------|-------------|
| <b>Skin Corrosion/Irritation</b>     | Category 1A |
| <b>Serious Eye Damage/Irritation</b> | Category 1  |

### Physical Hazards

None

### Danger

### Hazard Statement

H314 – Causes severe skin burns and eye damage.

### Pictograms



### Precautionary Statements

- P234 – Keep only in original container.
- P280 – Wear protective gloves, protective clothing, eye protection, and face protection.
- P260 – Do not breathe mist, vapors or spray.
- P390 – Absorb spillage to prevent material damage.
- P363 – Wash contaminated clothing before reuse.
- P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin  
P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
Immediately call a POISON CENTER or doctor/physician.  
P405 – Store locked up.  
P501 – Dispose of contents/container in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

---

## Section 03 - Composition / Information on Ingredients

---

| Chemical Name               | CAS Number | Weight % | Unique Identifiers |
|-----------------------------|------------|----------|--------------------|
| Copper Sulfate Pentahydrate | 7758-99-8  | 20.5%    | Not Available      |
| Sulfuric Acid               | 7664-93-9  | 0.78%    | Not Available      |

---

## Section 04 - First Aid Measures

---

|                                  |   |
|----------------------------------|---|
| <b>Inhalation</b>                | If symptoms are experienced, remove source of contamination or move victim to fresh air. Seek immediate medical attention.  |
| <b>Skin Contact / Absorption</b> | Avoid direct contact. Remove contaminated clothing. Rinse skin with lukewarm, gently flowing water. Seek immediate medical attention. Completely decontaminate clothing, shoes and leather goods before re-use or discard.  |
| <b>Eye Contact</b>               | Immediately flush eye(s) with lukewarm, gently flowing water for 60 minutes while forcibly holding the eyelids open to ensure complete irrigation of the eye tissue. If a contact lens is present, remove only if easy to do so. Neutral saline solution may be used as soon as it is available. Seek immediate medical attention.  |
| <b>Ingestion</b>                 | NEVER give anything by mouth if victim is rapidly losing consciousness, is unconscious or convulsing. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Have victim rinse mouth with water again. Seek medical attention. |
| <b>Additional Information</b>    | Not Available   |

---

## Section 05 - Fire Fighting Measures

---

|   |   |
|---|---|
| <b>Suitable Extinguishing Media</b>                   | Product does not burn. Use extinguishing media compatible with surrounding material. Foam, dry powder, carbon dioxide and water mist are all suitable extinguishing material                    |
| <b>Unsuitable Extinguishing Media</b>                 | None known  |
| <b>Specific Hazards Arising From the Chemical</b>     | Toxic sodium oxide fumes can be generated by thermal decomposition at elevated temperatures. Closed containers may rupture violently when heated.   |
| <b>Special Protective Equipment for Fire-Fighters</b> | Wear self-contained breathing apparatus and a chemical protective suit.<br>Do not allow extinguishing water to reach ground water or sewage system. Fight fire from a distance and stay upwind. |
| <b>Further Information</b>                            | Not Available   |

---

## Section 06 - Accidental Release Measures

---

|   |   |
|---|---|
| <b>Personal Precautions / Protective Equipment / Emergency Procedures</b> | Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so. Flush with water to remove any residue. |
| <b>Environmental Precautions</b>  | Prevent material from entering sewers and waterways. If drains, streams, soil or sewers become contaminated then notify local authority.                                |

**Methods and Materials for Containment and Cleaning Up**

Solutions should be contained by diking with inert material, such as sand or earth. Solutions can be recovered or carefully diluted with water and cautiously neutralized with caustic or sodium bicarbonate.  
LARGE SPILLS: Contact fire and emergency services and supplier for advice.

---

## **Section 07 - Handling and Storage**

---

**Precautions for Safe Handling**

This material is EXTREMELY CORROSIVE and HIGHLY REACTIVE. 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.

**Conditions for Safe Storage**

Store in a cool, dry, well-ventilated place. Keep container tightly closed, and away from incompatible materials.

**Incompatibilities**

Metals, strong acids, organic halogens compounds and organic nitro compounds.

---

## **Section 08 - Exposure Controls and Personal Protection**

---

**Exposure Limit(s)**

| <b>Component</b>            | <b>Regulation</b> | <b>Type of Listing</b> | <b>Value</b>       |
|-----------------------------|-------------------|------------------------|--------------------|
| Copper Sulfate Pentahydrate | OSHA              | PEL-T-TWA              | 1mg/m <sup>3</sup> |

**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**

Chemical goggles, full-face shield, or a full-face respirator should be worn at all times when product is handled. Contact lenses should not be worn; they may contribute to severe eye injury.

**Hand Protection**

Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

**Skin and Body Protection**

Body suite, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

Impervious boots of chemically resistant material should be worn at all times. No special footwear is required other than what is mandated at place of work.

**Respiratory Protection**

No protection required if outside or in a suitably ventilated area.

**Thermal Hazards**

Not Available

---

## **Section 09 - Physical and Chemical Properties**

---

**Appearance**

**Physical State**

Liquid

|  |   |
|--|---|
| <b>Colour</b>                                  | Clear Blue  |
| <b>Odour</b>                                   | Odourless   |
| <b>Odour Threshold</b>                         | Not Applicable  |
| <b><u>Property</u></b>                         |   |
| <b>pH</b>                                      | -1 to 1.5   |
| <b>Melting Point/Freezing Point</b>            | Not Available   |
| <b>Initial Boiling Point and Boiling Range</b> | Not Available   |
| <b>Flash Point</b>                             | Not Applicable  |
| <b>Evaporation Rate</b>                        | The only evaporation that occurs is water.  |
| <b>Flammability</b>                            | Non-Flammable   |
| <b>Upper Flammable Limit</b>                   | Not Applicable  |
| <b>Lower Flammable Limit</b>                   | Not Applicable  |
| <b>Vapour Pressure (mm Hg, 20°C)</b>           | ~0  |
| <b>Vapour Density (Air=1)</b>                  | Not Available   |
| <b>Relative Density</b>                        | Not Available   |
| <b>Solubility(ies)</b>                         | Very soluble in water.<br>Soluble in absolute alcohol, methanol and glycerol; moderately soluble in ethanol;<br>insoluble in acetone and diethyl ether. |
| <b>Partition Coefficient: n-octanol/water</b>  | Not Available   |
| <b>Auto-ignition Temperature</b>               | Not Applicable  |
| <b>Decomposition Temperature</b>               | Not Available   |
| <b>Viscosity</b>                               | 1.146 cSt @ 20°C  |
| <b>Explosive Properties</b>                    | Not Available   |
| <b>Specific Gravity (Water=1)</b>              | 1.185 to 1.205 @ 20°C   |
| <b>% Volatiles by Volume</b>                   | Not Available   |
| <b>Formula</b>                                 | Mixture   |
| <b>Molecular Weight</b>                        | Not Applicable  |

---

## **Section 10 - Stability and Reactivity**

---

|                   |                              |
|-------------------|------------------------------|
| <b>Reactivity</b> | Not Available                |
| <b>Stability</b>  | Normally stable if kept dry. |

|   |   |
|---|---|
| <b>Possibility of Hazardous Reactions</b> | Polymerization will not occur.  |
| <b>Conditions to Avoid</b>                | Avoid extremes in temperature   |
| <b>Incompatible Materials</b>             | Metals, strong acids, organic halogens compounds and organic nitro compounds.                       |
| <b>Hazardous Decomposition Products</b>   | Sulfur oxide and copper oxide fumes may be generated by thermal decomposition at high temperatures. |

## Section 11 - Toxicological Information

### Acute Toxicity

| Component | Oral LD <sub>50</sub> | Dermal LD <sub>50</sub> | LC <sub>50</sub> |
|-----------|-----------------------|-------------------------|------------------|
| POLYPRO   | 2351 mg/kg (rat)      | >2 g/kg (rabbit)        | Not Available    |

### Chronic Toxicity – Carcinogenicity

| Component | IARC   |
|-----------|--|
| POLYPRO   | Not considered to be carcinogenic by ACGIH and IARC. |

|  |   |
|--|---|
| <b>Skin Corrosion/Irritation</b>         | Corrosive to skin. Capable of producing burns, blisters, ulcers and permanent scarring.   |
| <b>Ingestion</b>                         | Ingestion can result in burns to the lips, tongue, throat, esophagus and stomach; abdominal pain; nausea; vomiting; diarrhea and death.   |
| <b>Inhalation</b>                        | Inhalation is only likely to occur if an aerosol is formed as copper sulfate does not readily form a vapour. Exposure to aerosol may lead to irritation of respiratory tract, inflammation of lungs, difficulty breathing. May cause pulmonary edema. |
| <b>Serious Eye Damage/Irritation</b>     | Corrosive. Capable of producing severe eye burns and permanent injury.  |
| <b>Respiratory or Skin Sensitization</b> | Copper sulfate is not known to be a skin sensitizer.  |
| <b>Germ Cell Mutagenicity</b>            | The available evidence does not suggest that copper sulfate is a mutagen.   |
| <b>Reproductive Toxicity</b>             | Copper sulfate is not known to cause reproductive toxicity.   |
| <b>STOT-Single Exposure</b>              | Breathing may result in respiratory irritation.   |
| <b>STOT-Repeated Exposure</b>            | Not Applicable  |
| <b>Aspiration Hazard</b>                 | Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. May cause severe pneumonitis and destruction of lung tissue. May cause pulmonary edema.  |
| <b>Synergistic Materials</b>             | Not Available   |

## Section 12 - Ecological Information

### Ecotoxicity

| Component                    | Toxicity to Algae                              | Toxicity to Fish                                      | Toxicity to Daphnia and Other Aquatic Invertebrates     |
|------------------------------|--|---|---|
| Copper sulfate               | Not Available                                  | LC <sub>50</sub> (Lepomis machochirus, 96hr): 884ug/L | EC <sub>50</sub> (Callinectes sapidus, 96hr): 28.0 mg/L |
| <b>Biodegradability</b>      | Not biodegradable.                             |   |   |
| <b>Bioaccumulation</b>       | Trace copper may bioaccumulate                 |   |   |
| <b>Mobility</b>              | Very mobile in soil and very soluble in water. |   |   |
| <b>Other Adverse Effects</b> | 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

---

| <b>UN Number</b>                  | UN 3264  |                      |                               |    |     |     |     |
|-----------------------------------|--|----------------------|-------------------------------|----|-----|-----|-----|
| <b>UN Proper Shipping Name</b>    | Corrosive Liquid, Acidic, Inorganic, N.O.S. (Copper sulfate pentahydrate & Sulfuric acid)  |                      |                               |    |     |     |     |
| <b>Transport Hazard Class(es)</b> | 8  |                      |                               |    |     |     |     |
| <b>Packaging Group</b>            | III  |                      |                               |    |     |     |     |
| <b>Environmental Hazards</b>      | Listed as a marine pollutant under Canadian TDG Regulations, schedule III.   |                      |                               |    |     |     |     |
| <b>Special Precautions</b>        | Not Available  |                      |                               |    |     |     |     |
| <b>Transport in Bulk</b>          | Not Available  |                      |                               |    |     |     |     |
| <b>Additional Information</b>     | <table><thead><tr><th><u>Packing Group</u></th><th><u>Limited Quantity Index</u></th></tr></thead><tbody><tr><td>II</td><td>1 L</td></tr><tr><td>III</td><td>5 L</td></tr></tbody></table> | <u>Packing Group</u> | <u>Limited Quantity Index</u> | II | 1 L | III | 5 L |
| <u>Packing Group</u>              | <u>Limited Quantity Index</u>  |                      |                               |    |     |     |     |
| II                                | 1 L  |                      |                               |    |     |     |     |
| III                               | 5 L  |                      |                               |    |     |     |     |

### 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** 2017 June 21

**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<sup>®</sup> 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) CHRIS
- 6) HSDB
- 7) 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](http://www.cleartech.ca)

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