



# Safety Data Sheet

SDS No.:  
SDS-IM/FG-C/03

Cuproxat FL

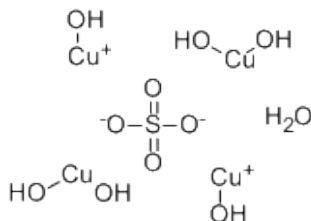
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## Section 1: Identification of the Hazardous Chemical and of the Supplier

### 1.1 Product Identifier

Product Name: Tribasic copper sulphate 27.2%  
Trade Name: Cuproxat FL  
Active Ingredient: Tribasic copper sulphate  
CAS No.(AI): 12527-76-3  
Structural Formula:



Recommended Usage: Fungicide

### 1.2 Supplier's Information

Address: Agricultural Chemicals (M) Sdn. Bhd.  
962, Lorong Perusahaan 8  
Taman Perindustrian Perai  
13600 Perai, Pulau Pinang  
Malaysia  
Tel.: +6-04-3907988  
Fax: +6-04-3905703  
Web: [www.agrichem.com.my](http://www.agrichem.com.my)  
Emergency Phone: +6-04-3907988

## Section 2: Hazard Identification

Classification: Hazardous to the Aquatic Environment – Acute Hazard, Category 1  
Hazardous to the Aquatic Environment – Chronic Hazard, Category 1

Pictogram:



Signal Word: Warning

Hazard Statement:

H400: Very toxic to aquatic life  
H410: Very toxic to aquatic life with long lasting effects



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## Precautionary Statement:

P273: Avoid release to the environment  
P391: Collect spillage.  
P501: Dispose of contents/containers to Kualiti Alam or other local authorised body.

## Section 3: Composition and Information of the Ingredients of the Hazardous Chemical

| Component                | CAS No.    | Weight, % | Hazard Code |
|--------------------------|------------|-----------|-------------|
| Tribasic copper sulphate | 12527-76-3 | 27.2%     | No data     |
| Ethandiol                | 107-21-1   | 5 – 10%   | No data     |

## Section 4: First-aid Measures

Call a POISON CENTER or doctor/physician if you feel unwell.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin Contact: Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse

Eye Contact: 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.

Ingestion: Do NOT induce vomiting. Rinse mouth. Call a POISON CENTER or doctor/physician.

Symptoms: Stomach pains, vomiting, symptoms attributed to the CNS and kidneys, hemolytic crisis accompanied by damage in the liver and brain.

Notes to Physician: No specific antidote, symptomatic treatment. Decontamination: 1 spoon of a 1% solution of Potassium hexacyanoferrat.

## Section 5: Fire-fighting Measures

Suitable Extinguishing Media: Carbon dioxide (CO<sub>2</sub>), chemical foam, dry chemical, aqueous film forming foam, water spray

Specific Hazard During Fire: No data available

Special Protective Equipment: Fire fighters should wear full-faced self-contained breathing apparatus and protective clothing



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## Section 6: Accidental Release Measures

**Personal Precautions:** Do not handle until all safety precautions have been read and understood. Wear appropriate protective equipment as required

**Environmental Precautions:** Avoid release to the environment

**Method for Cleaning Up:** Wear protective clothing as indicated in Section 8. Evacuate non essential personnel. Collect the spill into waste container for disposal. Wash the contaminated area with a little water and detergent. Adsorb with inert material such as clay or earth. Collect into the same container for disposal. Prevent the spillage from entering local drainage system.

## Section 7: Handling and Storage

**Precautions for Safe Handling:** Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment.

**Conditions for Safe Storage:** Keep in original container, tightly closed, out of reach of children. Keep away from food, drinks and animal feeding stuffs. Read the label before use. Do not contaminate water. Open dumping is prohibited.

**Incompatibles:** Strong acid and alkaline.

## Section 8: Exposure Control and Personal Protection

Exposure Limit:

| Source   | Component                | CAS No.    | Limit |                     |
|----------|--------------------------|------------|-------|---------------------|
| Austrian | Tribasic copper sulphate | 12527-76-3 | OEL   | 1mg/m <sup>3</sup>  |
| Austrian | Ethandiol                | 107-21-1   | OEL   | 26mg/m <sup>3</sup> |

**Engineering Control:** Local exhaust or general dilution ventilation

**Individual Protection Measure:** Avoid inhalation. Wash thoroughly after handling and before eating or drinking. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin and eyes.

**Personal Protective Equipment:**

- Eye Protection:** Protective goggles
- Skin Protection:** PVC gloves and long sleeved clothing
- Respiratory Protection:** Pesticide respiratory masks

## Section 9: Physical and Chemical Properties

**Appearance:** Greenish blue thick liquid



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|  |   |
|--|---|
| Odour:                                   | Characteristic odour                                    |
| Odour Threshold:                         | No data available                                       |
| pH:                                      | ca. 7 at 12.8g/ml                                       |
| Melting/Freezing Point:                  | ca. -3°C  |
| Initial Boiling Point:                   | ca. 100°C at 1.013kPa                                   |
| Boiling Range:                           | No data available                                       |
| Flash Point:                             | Does not flash  |
| Evaporation Rate:                        | No data available                                       |
| Flammability:                            | No data available                                       |
| Upper Flammability Limit:                | No data available                                       |
| Lower Flammability Limit:                | No data available                                       |
| Vapour Pressure:                         | Negligibly low. Active ingredient is an inorganic salt. |
| Vapour Density:                          | No data available                                       |
| Relative Density:                        | 1.28g/ml  |
| Solubility in Water:                     | Dispersible but practically insoluble in water          |
| Partition Coefficient P <sub>o/w</sub> : | No data available                                       |
| Auto-ignition Temperature:               | No data available                                       |
| Decomposition Temperature:               | No data available                                       |
| Viscosity:                               | No data available                                       |

## Section 10: Stability and Reactivity

|                                  |  |
|----------------------------------|--|
| Reactivity:                      | No data  |
| Chemical Stability:              | Stable for 2 years if stored at cool, dark and dry place |
| Hazardous Reaction:              | None of major importance                                 |
| Condition to Avoid:              | Direct sunlight, heat and extreme temperature            |
| Incompatible Material:           | Strong acids, aluminium and its alloys, iron             |
| Hazardous Decomposition Product: | No data  |

## Section 11: Toxicological Information

### 11.1 Acute Toxicity

|   |            |  |
|---|------------|--|
| Ingestion, Oral LD <sub>50</sub> :      |            |  |
| Rat                                     | 2500mg/kg  |  |
| Skin Contact, Dermal LD <sub>50</sub> : |            |  |
| Rat                                     | >2000mg/kg |  |
| Inhalation, LC <sub>50</sub> :          |            |  |
| Rat                                     | >2.556mg/L |  |

### 11.2 Chronic Effect from Short and Long Term Exposure

|                  |                    |
|------------------|--------------------|
| Skin Contact:    | No skin irritation |
| Eye Contact:     | No eye irritation  |
| Inhalation:      | No data available  |
| Ingestion:       | No data available  |
| Carcinogenicity: | No data available  |
| Mutagenicity:    | No data available  |



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Teratogenicity: No data available

11.3 Symptoms No data available

## Section 12: Ecological Information

Ecotoxicity:

|                          |  |           |  |
|--------------------------|--|-----------|--|
| Acute Aquatic Toxicity   |  |           |  |
|                          | Rainbow trout, LC <sub>50</sub> , 96 hr                          | >100mg/L  |  |
|                          | <i>Daphnia magna</i> , EC <sub>50</sub> , 48 hr                  | 0.72mg/L  |  |
|                          | Algae: <i>Scenedesmus subspicatus</i> , EC <sub>50</sub> , 48 hr | >100mg/L  |  |
| Chronic Aquatic Toxicity |  |           |  |
|                          | Rainbow Trout, NOEC, 21 days                                     | 65mg/L    |  |
| Toxicity to Bacteria     |  |           |  |
|                          | IC <sub>50</sub>   | >100mg/L  |  |
| Toxicity to Bird:        |  |           |  |
|                          | <i>Cortunix japonica</i> , LC <sub>50</sub>                      | 1.428mg/L |  |
| Toxicity to Bee:         |  |           |  |
|                          | Not toxic to bees  |           |  |

Persistence and Degradability: No data available  
Bioaccumulative Potential: No data available  
Mobility in Soil: No data available  
Other Adverse Effect: No data available

## Section 13: Disposal Information

Dispose of contents/container to Kualiti Alam / authorized body by DOE (pesticides).  
Do not re-use empty containers.

## Section 14: Transportation Information

| Land (ADR/RID)       |   |
|----------------------|---|
| Proper Shipping Name | Environmentally Hazardous Substance, Liquid, N.O.S. |
| Hazard Class         | 9   |
| Hazchem Code         | -   |
| UN number            | 3082  |
| Packing Group        | III   |
| Label / Mark         | 9   |
| Sea (IMDG)           |   |
| Proper Shipping Name | Environmentally Hazardous Substance, Liquid, N.O.S. |



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|                         |   |
|-------------------------|---|
| Hazard Class            | 9   |
| UN Number               | 3082  |
| Packing Group           | III   |
| Marine Pollutant        | MP  |
| Label                   | 9   |
| Transport Document Name | -   |
| <b>Air (IATA)</b>       |   |
| Proper Shipping Name    | Environmentally Hazardous Substance, Liquid, N.O.S. |
| Hazard Class            | 9   |
| UN number               | 3082  |
| Packing Group           | III   |
| Label / Mark            | 9   |
| Transport Document Name | -   |

## Section 15: Regulatory Information

Classification: Hazardous to the Aquatic Environment – Acute Hazard, Category 1  
Hazardous to the Aquatic Environment – Chronic Hazard, Category 1

Signal Word: Warning

Pictogram:



Pesticides Act: Class III  
Classification: Harmful

## Section 16: Other Information

Date of Preparation: 2 February 2016

Date of Revision: -

Reference Document: ICOP on Chemicals Classification and Hazard Communication 2014  
GHS Purple Book  
MSDS

Disclaimer: To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.