

**24 HOUR EMERGENCY ASSISTANCE**  
**CHEMTREC 800-424-9300**  
**HAZARD RATING**

|            |               |   |
|------------|---------------|---|
| 4-EXTREME  | Health Hazard | 2 |
| 3-SEVERE   | Flammability  | 0 |
| 2-MODERATE | Reactivity    | 0 |
| 1-SLIGHT   |               |   |
| 0-MINIMAL  |               |   |

**IMPORTANT**  
**MATERIAL SAFETY DATA SHEET**

READ CAREFULLY BEFORE USING CHEMICAL  
OSHA requires that this form be kept on file.

**Product No.** SA 9487 M  
**Product Name** CUPRIC CHLORIDE,  
DIHYDRATE

**Chemical Synonyms** Copper (II) Chloride, Dihydrate  
**Formula** CuCl<sub>2</sub>•2H<sub>2</sub>O  
**C.A.S. No.** 10125-13-0

| Principal Hazardous Component(s) | %   | P.E.L.                   | TLV Units                   |
|----------------------------------|-----|--------------------------|-----------------------------|
| Cupric Chloride*                 | 99+ | 1 mg/m <sup>3</sup> (Cu) | 1 mg(Cu)/m <sup>3</sup> TWA |

\* chemical subject to the reporting requirements of SARA Title III.

|                               |                                  |  |               |
|-------------------------------|----------------------------------|--|---------------|
| <b>Melting Point (°F)</b>     | Loses water @ 110°C              | <b>Specific Gravity (H<sub>2</sub>O=1)</b> | 2.39 @ 22.4°C |
| <b>Boiling Point (°F)</b>     | Decomposes                       | <b>Percent Volatile by Volume (%)</b>      | N/A           |
| <b>Vapor Pressure (mm Hg)</b> | None                             | <b>Evaporation Rate (----- =1)</b>         | None          |
| <b>Vapor Density (Air=1)</b>  | None                             |  |               |
| <b>Solubility in Water</b>    | 110.4 @ 0°C                      |  |               |
| <b>Appearance &amp; Odor</b>  | Light blue-green odorless solid. |  |               |

| Flash Point (Method Used) | Nonflammable                                       | Flammable Limits in Air % by Volume ----- | Lower | Upper |
|---------------------------|--|---|-------|-------|
|                           |  |   | N/A   | N/A   |
| <b>Extinguisher Media</b> | Carbon dioxide, dry chemical, foam or water spray. |   |       |       |

**Special Firefighting Procedures**  
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

**Unusual Fire and Explosion Hazards**  
None

**D.O.T.** Copper chloride, 8, UN2802, PGIII

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

**Threshold Limit Value**  
1 mg(Cu)/m<sup>3</sup> TWA 9150.

**Effects of Overexposure**  
Corrosive to eyes. Irritant to skin and mucous membrane of respiratory and gastrointestinal systems. **Toxicity:** LD<sub>50</sub>  
Human Oral = 50 mg/kg

**Emergency and First Aid Procedures**  
Call physician. **SKIN:** Remove contaminated clothing. Wash with soap and water. **EYES:** Wash with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **INGESTION:** Give several glasses of water or milk. **DO NOT** induce vomiting. Never give anything by mouth to an unconscious person.

|  |   |
|--|---|
| <b>Stability</b><br>Stable <input checked="" type="checkbox"/> Unstable <input type="checkbox"/>                         | <b>Conditions to Avoid</b><br>Strong alkalis. |
| <b>Incompatibility (Materials to Avoid)</b>  | Strong alkalis.                               |
| <b>Hazardous Decomposition Products</b>  | Hydrogen chloride.                            |
| <b>Hazardous Polymerization</b><br>May Occur <input type="checkbox"/> Will Not Occur <input checked="" type="checkbox"/> | <b>Conditions to Avoid</b><br>N/A             |

**Steps to be Taken in Case Material is Released or Spilled**  
Contain with soaking agent such as vermiculite.

**Waste Disposal Method**  
Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.  
Dispose of in accordance with all applicable Federal, state and local regulations.

|  |   |                       |                |      |
|--|---|-----------------------|----------------|------|
| <b>Respiration Protection (Specify Type)</b> | NIOSH approved dust mask.                 |                       |                |      |
| <b>Ventilation</b>                           | <b>Local Exhaust</b>                      | X                     | <b>Special</b> | ---- |
|  | <b>Mechanical (General)</b>               | ----                  | <b>Other</b>   | ---- |
| <b>Protective Gloves</b>                     | Appropriate chemical resistant gloves     | <b>Eye Protection</b> | Goggles        |      |
| <b>Other Protective Equipment</b>            | Lab coat. Wash thoroughly after handling. |                       |                |      |

**Precautions to be Taken in Handling & Storing**  
Keep container tightly closed when not in use.  
Wear suitable eye and face protection, as well as gloves and protective clothing.

**Other Precautions**  
Read label on container before using. Do not wear contact lenses when working with chemicals.  
None

**Approved by** Steven C. Quandt **Effective Date** 2/4/2005 For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

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