1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product code: C1385
Product Name: CUPRIC CHLORIDE, DIHYDRATE, CRYSTAL, REAGENT, ACS
Chemical Name: No information available
Synonyms: Copper (2+) chloride dihydrate; Copper Chloride dihydrate; Copper chloride (CuCl2), dihydrate; Copper (II) chloride dihydrate
Recommended use: Catalyst.
CAS #: 10125-13-0
RTECS #: GL7030000
Formula: CuCl2.2H2O
CI#: Not available
Supplier: Spectrum Chemicals and Laboratory Products, Inc.
14422 South San Pedro St.
Gardena, CA  90248
(310) 516-8000
Order Online At: https://www.spectrumchemical.com
Emergency Telephone Number: CHEMTREC: 1-800-424-9300
Contact Person: Regina Wachenheim (East Coast)
Contact Person: Martin LaBenz (West Coast)

See Section 8.
2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
DANGER CORROSIVE!
The product causes burns of eyes, skin and mucous membranes
Harmful if swallowed

<table>
<thead>
<tr>
<th>Odor:</th>
<th>Physical state:</th>
<th>Appearance:</th>
<th>Color:</th>
</tr>
</thead>
</table>

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure:
Skin. Inhalation. Ingestion.

Acute Potential Health Effects:

Skin Contact:
Causes severe skin irritation and burns with itching, erythema, burning pain.

Eye Contact:
Severe eye irritation. Causes eye burns. May cause corneal damage. Symptoms can include redness, pain, blurred vision, discoloration, loss of vision, eye damage such permanent corneal opacification, chemical conjunctivitis, ulceration.

Inhalation:
Irritating to respiratory system. May cause pulmonary edema.

Ingestion:
Causes burns. Can burn mouth, throat, and stomach. May cause abdominal pain, nausea, vomiting, diarrhea. Harmful if swallowed.

Chronic Potential Health Effects:

<table>
<thead>
<tr>
<th>Component</th>
<th>Carcinogen Status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cupric Chloride, Dihydrate</td>
<td>No information available</td>
</tr>
<tr>
<td>10125-13-0 (100)</td>
<td></td>
</tr>
</tbody>
</table>


Mutagenic Effects: No information available

Teratogenic Effects: No information available

Aggravated Medical Conditions: No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

Product code: C1385

Product name: CUPRIC CHLORIDE, DIHYDRATE, CRYSTAL, REAGENT, ACS
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cupric Chloride, Dihydrate</td>
<td>10125-13-0</td>
<td>100</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

General Advice: Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

Skin Contact: Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician immediately.

Eye Contact: Flush eye with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. Call a physician immediately.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.

Notes to Physician: Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties

Flashpoint (°C/°F): No information available.

Flash Point Tested according to: Not available

Lower Explosion Limit (%): No information available

Upper Explosion Limit (%): No information available

Autoignition Temperature (°C/°F): No information available

Suitable Extinguishing Media: The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

Unsuitable Extinguishing Media: No information available.

Hazardous Combustion Products: Hydrogen chloride gas, copper oxides

Product code: C1385  Product name: CUPRIC CHLORIDE, DIHYDRATE, CRYSTAL, REAGENT, ACS
Specific hazards: Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated. When mixed with postassium or sodium, it produces a strong explosion on impact.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Specific Methods: No information available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods for Cleaning Up: Use appropriate tools to put the spilled solid in a suitable waste disposal container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling

Technical Measures/Precautions: Use only in area provided with appropriate exhaust ventilation. Keep away from incompatible materials.

Safe Handling Advice: Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapours/dust. Handle in accordance with good industrial hygiene and safety practice.

Storage


8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure: Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Product code: C1385  Product name: CUPRIC CHLORIDE, DIHYDRATE, CRYSTAL, REAGENT, ACS
Personal Protective Equipment

Eye protection:  Face-shield.

Skin and body protection:  Chemical resistant protective suit. Gloves. boots.

Respiratory protection:  Wear respirator with dust filter..

Hygiene measures:  Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

National occupational exposure limits

United States

<table>
<thead>
<tr>
<th>Components</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cupric Chloride, Dihydrate - 10125-13-0</td>
<td>None</td>
<td>1mg/m³ TWA (as Cu)</td>
<td>1 mg/m³ TWA (as Cu)</td>
<td>None</td>
</tr>
</tbody>
</table>

Canada

<table>
<thead>
<tr>
<th>Components</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Ontario</th>
<th>Quebec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cupric Chloride, Dihydrate 10125-13-0</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
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Australia and Mexico

<table>
<thead>
<tr>
<th>Components</th>
<th>Australia</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cupric Chloride, Dihydrate 10125-13-0</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

9. PHYSICAL AND CHEMICAL PROPERTIES
## 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Crystals</td>
</tr>
<tr>
<td>Color</td>
<td>Blue. Blue green</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Taste</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash point (°C)</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower Explosion Limit (%)</td>
<td>No information available</td>
</tr>
<tr>
<td>Upper Explosion Limit (%)</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point/range(°C/°F)</td>
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</tr>
<tr>
<td>Boiling point/range(°C/°F)</td>
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</tr>
<tr>
<td>pH</td>
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<tr>
<td>Specific gravity</td>
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</tr>
<tr>
<td>Density (g/cm³)</td>
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<tr>
<td>Decomposition temperature(°C/°F)</td>
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</tr>
<tr>
<td>Bulk density</td>
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</tr>
<tr>
<td>Evaporation rate</td>
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</tr>
<tr>
<td>Vapor density</td>
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</tr>
<tr>
<td>Odor threshold (ppm)</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Freely soluble in water</td>
</tr>
<tr>
<td>Freely soluble in Methanol</td>
<td></td>
</tr>
<tr>
<td>Freely soluble in Ethyl alcohol</td>
<td></td>
</tr>
<tr>
<td>Soluble in Acetone</td>
<td></td>
</tr>
<tr>
<td>Soluble in ethyl acetate</td>
<td></td>
</tr>
<tr>
<td>Slightly soluble in Ether</td>
<td></td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>76 parts in 100 parts water @ 25 deg. C</td>
</tr>
</tbody>
</table>

## 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable at normal conditions</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Exposure to moisture. Exposure to moist air. Deliquescent in moist air. Efflorescent in dry air. Incompatible materials.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Copper oxides. Hydrogen chloride gas.</td>
</tr>
<tr>
<td>Possibility of Hazardous Reactions</td>
<td>Evolves flammable hydrogen gas on contact with metals Contact with acids or acid fumes may evolve highly toxic hydrogen chloride fumes Water loss from 70-200 deg. C</td>
</tr>
<tr>
<td>Polymerization</td>
<td>Hazardous polymerisation does not occur</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>No information available</td>
</tr>
<tr>
<td>Special Remarks on Corrosivity</td>
<td>No information available</td>
</tr>
</tbody>
</table>
11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Cupric Chloride, Dihydrate - 10125-13-0

LD50/oral/rat = No information available
LD50/oral/mouse = 110 mg/kg
LD50/dermal/rat = No information available
LD50/dermal/rabbit = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information

LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LD50/oral/mouse = 110 mg/kg
LD50/oral/rat = No information available

Local Effects

Skin irritation: Corrosive. Severe skin irritation. Causes burns. Causes severe skin irritation and burns with itching, erythema, burning pain. It may also cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

Eye irritation: Corrosive. Severe eye irritation. Causes burns. May cause corneal damage. Symptoms can include redness, pain, blurred vision, discoloration, loss of vision, eye damage such permanent corneal opacification, chemical conjunctivitis, ulceration.

Inhalation: Causes respiratory tract (nose, throat, lungs), and mucous membrane irritation causing coughing, sore throat, wheezing, and shortness of breath. It may cause ulceration and perforation of the nasal septum. It may produce delayed pulmonary edema. When heated this compound may give off copper fume, which can cause "fume metal fever" with symptoms similar to the common cold, including chills and stiffness of the head.

Ingestion: Harmful if swallowed. Ingestion of sufficient concentrations may result in metallic taste, salivation, headache, nausea, vomiting, burning in the mouth, epigastrium (esophagus and stomach), diaphoresis, abdominal/gastric pain, gastrointestinal bleeding, and bloody diarrhea. The vomitus is characteristically greenish-blue. Other systemic effects may occur including hemolysis, anemia, and anuria, oliguria, hematuria, acute kidney tubular necrosis, jaundice, hepatomegaly (i.e., liver and kidney damage) (secondary to hemolysis). May affect behavior/central nervous system (somnolence, convulsions). Rarely methemoglobinemia has been reported.

Sensitization: No information available

Chronic Toxicity

Product code: C1385  Product name: CUPRIC CHLORIDE, DIHYDRATE, CRYSTAL, REAGENT, ACS
Chronic Toxicity

Repeated exposure may cause thickening of the skin and greenish color to the skin and hair. Repeated exposure by inhalation may cause ulceration of the nasal septum and shrinking of the inner lining of the nose. Repeated skin contact may cause dermatitis. Repeated or prolonged ingestion may cause liver and kidney damage due to accumulation of copper in these organs. Chronic copper poisoning is rare. It has been mainly observed in individuals with Wilson disease or Indian childhood cirrhosis, in which progressive copper toxicity results from a hereditary metabolic disorder involving deficiency in the copper-binding and transport protein ceruloplasmin. Severe liver disease involving massive accumulation of copper in the liver has been reported in a few cases not meeting the diagnostic criteria for either Wilson disease or Indian childhood cirrhosis. Moreover, this so-called Indian childhood cirrhosis is becoming increasingly recognized in non-Indian children, and hepatic copper levels should be determined in all cases of childhood liver failure of unknown origin (aka idiopathic copper toxicosis).

Generally, the effects of copper excess are reversible. Repeated or prolonged inhalation may affect the blood (changes in white blood cell count), metabolism (metabolic acidosis).

Carcinogenic effects: Not considered carcinogenic

<table>
<thead>
<tr>
<th>Components</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA HCS - Carcinogens</th>
<th>ACGIH - Carcinogens</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cupric Chloride, Dihydrate</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Mutagenic Effects: No information available
Reproductive Effects: No information available
Teratogenic Effects: No information available

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals: No information available
Ecotoxicity effects: No data available.
Aquatic toxicity: No information available
Mobility: No information available
Persistence and degradability: No information available
Bioaccumulative potential: No information available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.
Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cupric Chloride, Dihydrate</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

### 14. TRANSPORT INFORMATION

**DOT**

- **UN-No:** UN2802
- **Proper Shipping Name:** Copper chloride
- **Hazard Class:** 8
- **Packing Group:** III
- **Subsidiary Risk:** Not applicable
- **Marine Pollutant:** Marine Pollutant
- **ERG No:** 154
- **DOT RQ (lbs):** No information available
- **Symbol(s):** PP, R2

**TDG (Canada)**

- **UN-No:** UN2802
- **Proper Shipping Name:** Copper chloride
- **Hazard Class:** 8
- **Packing Group:** III
- **Subsidiary Risk:** No information available
- **Description:** No information available

**ADR**

- **UN-No:** UN2802
- **Proper Shipping Name:** Copper chloride
- **Hazard Class:** 8
- **Packing Group:** III
- **Subsidiary Risk:** No information available
- **Classification Code:** No information available
- **Description:** No information available
- **CEFIC Tremcard No:** No information available

**IMO / IMDG**

- **UN-No:** UN2802
- **Proper Shipping Name:** Copper chloride
- **Hazard Class:** 8
- **Packing Group:** III
- **Subsidiary Risk:** P
- **Description:** No information available
- **IMDG Page:** No information available
- **Marine Pollutant:** Marine Pollutant
- **EMS:** F-A
- **MFAG:** No information available
- **Maximum Quantity:** No information available

**RID**

- **UN-No:** UN2802
- **Proper Shipping Name:** Copper chloride
- **Hazard Class:** 8
- **Packing Group:** III
- **Subsidiary Risk:** 8

**Product code:** C1385

**Product name:** CUPRIC CHLORIDE, DIHYDRATE, CRYSTAL, REAGENT, ACS
15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Components</th>
<th>U.S. TSCA</th>
<th>Philippines (PICCS)</th>
<th>KOREA KECL</th>
<th>Japan ENCS</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cupric Chloride, Dihydrate</td>
<td>Not Listed</td>
<td>Present</td>
<td>Not present</td>
<td>Not present</td>
<td>Present</td>
<td>Present</td>
<td>Not present</td>
</tr>
</tbody>
</table>

U.S. Regulations

*Cupric Chloride, Dihydrate*
- **New Jersey RTK Hazardous Substance List:** sn 2215 (copper compounds)
- **New Jersey (EHS) List:** sn 2215 TPQ: 500 lb. (copper compounds)
- **New Jersey - Discharge Prevention - List of Hazardous Substances:** Present (copper compounds)
- **Pennsylvania RTK: Environmental hazard (copper compounds)**
- **Pennsylvania RTK - Environmental Hazard List:** Present (copper compounds)


**Chemicals Known to the State of California to Cause Cancer:**
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cupric Chloride, Dihydrate</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

CERCLA/SARA

<table>
<thead>
<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cupric Chloride, Dihydrate</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Copper compounds</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Product code:** C1385  
**Product name:** CUPRIC CHLORIDE, DIHYDRATE, CRYSTAL, REAGENT, ACS
U.S. TSCA

<table>
<thead>
<tr>
<th>Components</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cupric Chloride, Dihydrate</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Canada

WHMIS hazard class:
D1B  Toxic materials
E    Corrosive material

Cupric Chloride, Dihydrate
D1B  E

Canada Controlled Products Regulation:
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

<table>
<thead>
<tr>
<th>Components</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cupric Chloride, Dihydrate</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>CEPA Schedule I - Toxic Substances</th>
<th>CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cupric Chloride, Dihydrate</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

EU Classification

R-phrase(s)
R34 - Causes burns.
R22 - Harmful if swallowed.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S60 - This material and its container must be disposed of as hazardous waste.
S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

<table>
<thead>
<tr>
<th>Components</th>
<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cupric Chloride, Dihydrate</td>
<td></td>
<td>No information</td>
<td></td>
</tr>
</tbody>
</table>

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:
Xn - Harmful.
N - Dangerous for the environment.

Product code: C1385
Product name: CUPRIC CHLORIDE, DIHYDRATE, CRYSTAL, REAGENT, ACS
16. OTHER INFORMATION

The MSDS format complies with ANSI Z400.1/Z129.1-2010 standards.

Preparation Date: 27-Jun-2014

Reason for revision: Not applicable

Prepared by: Sonia Owen

Literature reference: No information available

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.