SAFETY DATA SHEET

CuPRO 5000

Fungicide/Bactericide

Section 1. Identification

Product name: CuPRO 5000 Fungicide/Bactericide
Other means of identification: EPA Registration Number 80289-2-67690
CAS No. 1332-40-7 (Copper hydroxide)

Relevant identified uses of the substance or mixture and uses advised against

Sector of Use: Agriculture
Application of the substance / the mixture: Agricultural Fungicide / Bactericide

Restrictions on use: See product label for restrictions.

Supplier's details: SePRO Corporation
11550 North Meridian Street
Suite 600
Carmel, IN 46032 U.S.A.
Tel: 317-580-8282
Toll free: 1-800-419-7779
Fax: 317-580-8290
Monday - Friday, 8am to 5pm E.S.T.
www.sepro.com

Emergency telephone: INFOTRAC - 24-hour service 1-800-535-5053

The following recommendations for exposure controls and personal protection are intended for the manufacture, formulation and packaging of this product. For applications and/or use, consult the product label. The label directions supersede the text of this Safety Data Sheet for application and/or use.

Section 2. Hazards identification

Classification of the substance or mixture

GHS05 Corrosion
Eye Dam. 1
H318 Causes serious eye damage.

Acute Tox. 4
H302 Harmful if swallowed.

Acute Tox. 4
H332 Harmful if inhaled.

Label elements
GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

Signal word
Danger

Hazard-determining components of labeling: Copper hydroxide

Hazard statements
Harmful if swallowed or if inhaled. Causes serious eye damage.

Precautionary statements
Avoid breathing dust/fume/gas/mist/vapors/spray

Hazard description:
Causes irreversible eye damage. Harmful if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing dust.

Classification system:
NFPA ratings (scale 0 – 4)

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

HAZARD INDEX: 4 Severe Hazard
3 Serious Hazard
2 Moderate Hazard
1 Slight Hazard
0 Minimal Hazard

HMIS-ratings (scale 0 - 4)
Health = 2  
Fire = 0  
Reactivity = 0

4 Severe Hazard  
3 Serious Hazard  
2 Moderate Hazard  
1 Slight Hazard  
0 Minimal Hazard

Other hazards

Results of PBT and vPvB assessment  

PBT: Not applicable in U.S.  
vPvB: Not applicable in U.S.

Section 3. Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:  

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Acute Tox.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>20427-59-2</td>
<td>Copper Hydroxide</td>
<td>H332</td>
<td>61.3%</td>
</tr>
</tbody>
</table>

Section 4. First aid measures

Description of first aid measures

General information: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-535-5053 for emergency medical treatment information.

After inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call poison control center or doctor for further treatment advice.

After skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

After eye contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

After swallowing: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Information for doctor:  
Most important symptoms and effects, both acute and delayed  
Unknown
Section 5. Fire-fighting measures

Extinguishing media

Suitable Extinguishing Media: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant form.

Special hazards arising from the substance or mixture: No further relevant information available.

Advice for firefighters

Firefighters and others that may be exposed to vapors, mists, dusts, or products of combustion should wear full protective clothing and self-contained breathing apparatus. Equipment should be thoroughly cleaned after use.

Protective equipment: Wear self-contained respiratory protective device.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary people away and isolate hazard area. Wear appropriate personal protective equipment described in Section 8.

Environmental precautions:

This pesticide is toxic to fish and aquatic invertebrates and may contaminate water through runoff. This product has a potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

Methods and material for containment and cleaning up:

Sweep up spill, scoop or vacuum and remove. Flush residual spill area with water. Contain large spills with dikes and transfer the material to appropriate containers for reclamation or disposal. Absorb remaining material or small spills with an inert material and then place in a chemical waste container. Flush residual spill area with water. Refer to Section 13 for disposal information and Section 15 for reportable quantity information.

Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

Section 7. Handling and storage

Handling:

Precautions for safe handling

Thorough dedusting. Ensure good ventilation/exhaustion at the workplace. Prevent formation of dust. Causes irreversible eye damage. Harmful if swallowed. Harmful if absorbed through
skin. Harmful if inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing dust.

Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.

Conditions for safe storage, including any incompatibilities

Storage: Store under well-ventilated, cool and dry storage conditions. Do not store under moist conditions. Store away from foodstuffs. Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

Section 8. Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing.

Breathing equipment: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

Material of gloves: chemical-resistant gloves such as Natural Rubber.
Eye protection

- Tightly sealed goggles

Body protection:

- Handlers must wear: long-sleeved shirt and long pants; shoes plus socks; goggles or faceshield; chemical-resistant gloves such as Natural Rubber.

## Section 9. Physical and chemical properties

Information on basic physical and chemical properties

### General Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance:</strong></td>
<td></td>
</tr>
<tr>
<td>Form:</td>
<td>Granulate</td>
</tr>
<tr>
<td>Color:</td>
<td>Light blue-green</td>
</tr>
<tr>
<td>Odor:</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH:</td>
<td>8.8 – 9.0</td>
</tr>
<tr>
<td>Melting point:</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Boiling point:</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>Not determined</td>
</tr>
<tr>
<td>Decomposition Temp.:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto igniting:</td>
<td>Product is not self-igniting</td>
</tr>
<tr>
<td>Danger of Explosion:</td>
<td>Product does not present an explosion hazard</td>
</tr>
<tr>
<td>Explosion limits:</td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Density:</td>
<td>1.02 g/cm³ (8.512 lbs/gal)</td>
</tr>
<tr>
<td>Relative density:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapour density:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>Dispersible</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>Not determined</td>
</tr>
<tr>
<td>Viscosity:</td>
<td></td>
</tr>
<tr>
<td>Dynamic:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Other information:</td>
<td>No further relevant information available</td>
</tr>
</tbody>
</table>

## Section 10. Stability and reactivity

Reactivity

- No further relevant information available.

Chemical stability

- This product should be stable for at least two years under normal conditions of warehouse storage. Store under well-ventilated, cool and dry storage conditions away from foodstuffs, reducing agents and acids. Do not store under moist conditions.

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: Store under well-vented, cool and dry storage conditions, Avoid moisture conditions.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

### Section 11. Toxicological information

Information on toxicological effects:

**Acute toxicity:**
- Oral LD$_{50}$: 944.6 mg/kg (rat)
- Dermal LD$_{50}$: >2.000 mg/kg (rat)
- Inhalation LC$_{50}$: >1.28 mg/l (rat; 4hr)

**Primary skin irritation:** No irritant effect.

**Primary eye irritation:** Moderately Irritating.

**Sensitization:** No sensitizing effects known.

**Additional toxicological information:** The product shows the following dangers according to internally approved calculation methods for preparations: Harmful.

**Carcinogenic categories**
- IARC: None of the ingredients are listed.
- NTP: None of the ingredients are listed.
- OSHA-Ca: None of the ingredients are listed.

### Section 12. Ecological information

**Toxicity:** This pesticide is toxic to fish and aquatic invertebrates and may contaminate water through runoff. This product has a potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

**Aquatic toxicity:** No further relevant information available.

**Persistence and degradability:** No further relevant information available.

**Behavior in environmental systems:**

**Bioaccumulative potential:** No further relevant information available.

**Mobility in soil:** No further relevant information available.

**Additional ecological information:**
- **General notes:** Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.
Results of PBT and vPvB assessment

PBT: Not applicable.

PvB: Not applicable.

Other adverse effects No further relevant information available.

Section 13. Disposal considerations

Waste treatment methods: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Uncleaned packagings:

Recommendation: Empty the package completely. Then dispose of the empty container according to state and local regulations. Place in trash or offer for recycling if available or return it to the Seller, or, if allowed by state and local authorities, by burning. If burned stay out of smoke.

Section 14. Transport information

UN-Number DOT, ADR, ADN, IMDG, IATA Void

UN proper shipping name ADR, ADN, IMDG, IATA Not regulated

Transport hazard class(es) ADR, ADN, IMDG, IATA Void

Packing group ADR, IMDG, IATA Void

Environmental hazards: Marine pollutant: No

Special precautions for user Not applicable

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable

UN "Model Regulation": Not regulated

Section 15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

EPA /FIFRA Information: This chemical is a pesticide product registered by the Environmental Protection Agency (EPA) and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals.

The following is the hazard information as required on the pesticide label.
SARA Title III
Section 355 (extremely hazardous substances):
None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):
CAS No.: 20427-59-2; Copper hydroxide
TSCA (Toxic Substances Control Act):
CAS No.: 20427-59-2; Copper hydroxide

Proposition 65
Chemicals known to cause cancer:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients are listed.

Chemicals known to cause developmental toxicity:
None of the ingredients are listed.

Carcinogenicity categories
EPA (Environmental Protection Agency)
None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)
None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients are listed.

GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms
Not applicable

Signal word
(US EPA) DANGER

Hazard-determining components of labeling:
Copper hydroxide

Hazard statements
Not applicable

Precautionary statements
Causes irreversible eye damage. Harmful if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing dust. Avoid breathing dust/fume/gas/mist/vapors/spray.

Chemical safety assessment
A Chemical Safety Assessment has not been carried out.

Section 16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Date of Issue: September 11, 2015

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances 
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
AcuteTox. 4: Acute toxicity, Hazard Category 4  
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1  

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