



UNIVAR

Material Safety Data Sheet

NR01495

Copper Oxychloride

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Id: NR01495

Product Name: Copper Oxychloride

Synonyms: Cuprokylt, Dicopper chloride trihydroxide.

Chemical Family: Inorganic copper compound

Application: Fungicide. Pest Control Products Act Registration No. 13245

Distributed By:

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Prepared By: The Safety, Health and Environment Department of Univar Canada Ltd.

Preparation date of MSDS: 26 June 2007

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Percentage (W/W)	LD50s and LC50s Route & Species:
Copper oxychloride 1332-40-7	84	Oral LD50 (Rat) 700 mg/kg

Note: Copper Oxychloride 50 WP contains 84% w/w copper oxychloride equivalent to 50% w/w elemental copper (Cu), together with various coformulants and inerts.

3. HAZARDS IDENTIFICATION

Potential Acute Health Effects:

Eye Contact: May irritate eyes.

Skin Contact: May cause skin irritation.

Inhalation: May be harmful if inhaled. Prolonged inhalation may cause irritation of the mucous membrane.

Ingestion: May be harmful if swallowed. Irritation of the mouth, pharynx, esophagus and stomach can develop following ingestion of this product. May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation and central nervous system depression. May cause lowered blood pressure.

4. FIRST AID MEASURES

Eye Contact: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes. Get medical attention. Remove contaminated clothing and laundry before reuse.

Inhalation: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Notes to Physician: Treatment based on sound judgment of physician and individual reactions of patient. Contact a poison control centre for additional treatment information. Symptoms of poisoning consistent with other inorganic salts of copper. Symptoms may be slow in onset and often non-specific.

5. FIRE FIGHTING MEASURES

Flash Point: >55 °C / >131 °F

Flash Point Method: Not applicable.

Autoignition Temperature: Not Available.

Flammable Limits in Air (%): Not Available.

Extinguishing Media: Use DRY chemicals, CO₂, alcohol foam or water spray.

Special Exposure Hazards: Use water spray to cool fire-exposed containers and structures. Contain fire control water for later disposal. Emits toxic fumes under fire conditions.

Hazardous Decomposition/Combustion Materials (under fire conditions): Toxic fumes.

Special Protective Equipment: Fire fighters should wear full protective clothing, including self-contained breathing equipment.

NFPA RATINGS FOR THIS PRODUCT ARE: Not Available.

HMIS RATINGS FOR THIS PRODUCT ARE: Not Available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures: Wear appropriate protective equipment.

Environmental Precautionary Measures: Prevent entry into sewers or streams, dike if needed. Spills or releases should be reported, if required to the appropriate municipal, provincial and federal agencies.

Procedure for Clean Up: Use absorbent materials. Pick up solids and put in an appropriate sealed container for later disposal. Avoid direct contact with material.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Do not ingest. Avoid dust generation. Use with adequate ventilation. Use good personal hygiene.

Storage: Store in a cool, dry, well ventilated area, away from heat and ignition sources. Store in accordance with good industrial practices. Keep away from food and feed products. Place away from incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Localized ventilation should be used to control dust levels.

Respiratory Protection: Not normally needed. If exposure exceeds occupational exposure limits, use an appropriate NIOSH-approved respirator.

Gloves:

Impervious gloves. Neoprene gloves. Nitrile gloves.

Skin Protection: Apron, coveralls and/or other resistant protective clothing. Rubber boots.

Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.

Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work-station location.

Ingredients	Exposure Limit - ACGIH	Exposure Limit - OSHA	Immediately Dangerous to Life or Health - IDLH
Copper oxychloride	Not available.	Not available.	Not Available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Fine Powder

Colour: Light Blue

Odour: Odourless

pH 6.0 - 9.5

Specific Gravity: 0.9 - 1.10

Boiling Point: Not Available.

Freezing/Melting Point: >130 °C / >266 °F

Vapour Pressure: Negligible @ 20°C.

Vapour Density: Not Available.

% Volatile by Volume: Not Available.

Evaporation Rate: Not Available.

Solubility: Insoluble in water.

VOCs: Not Available.

Viscosity: Not Available.

Molecular Weight: Not Available.

Other: Not Available.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Avoid excessive heat, open flames and all ignition sources.

Materials to Avoid: Metals. Lime sulphur. Thiram. Other dithiocarbamates. Strong oxidizers. Strong acids.

Hazardous Decomposition Products: Thermal decomposition of copper oxychloride occurs at 220 C with the formation of copper oxide and release of toxic hydrogen chloride.

Additional Information:

Copper oxychloride is corrosive to metals such as mild steel, iron and aluminum.

11. TOXICOLOGICAL INFORMATION

Principle Routes of Exposure

Ingestion: May be harmful if swallowed. Irritation of the mouth, pharynx, esophagus and stomach can develop following ingestion of this product. May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation and central nervous system depression. May cause lowered blood pressure.

Skin Contact: May cause skin irritation.

Inhalation: May be harmful if inhaled. Prolonged inhalation may cause irritation of the mucous membrane.

Eye Contact: May irritate eyes.

Additional Information: Repeated overexposure may cause liver and kidney effects. Pre-existing eye, skin and respiratory disorders may be aggravated by exposure to this product.

Acute Test of Product:

Acute Oral LD50: Not Available.
 Acute Dermal LD50: Not Available.
 Acute Inhalation LC50: Not Available.

Carcinogenicity:

Ingredients	IARC - Carcinogens	ACGIH - Carcinogens
Copper oxychloride	Not listed.	Not listed.

Carcinogenicity Comment: No additional information available.

Reproductive Toxicity/ Teratogenicity/ Embryotoxicity/ Mutagenicity: Not Available.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

Ingredients	Ecotoxicity - Fish Species Data	Acute Crustaceans Toxicity:	Ecotoxicity - Freshwater Algae Data
Copper oxychloride	Not Available.	Not Available.	Not Available.

Other Information: Harmful to livestock. Keep all livestock out of treated areas for at least three weeks. Harmful to fish or aquatic life. Non-toxic to bees. Low toxicity to terrestrial fauna. Slow hydrolysis. The hydrolysed forms will be finally assimilated by the different living and mineral organisms.

13. DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.

Contaminated Packaging: Empty containers should be recycled or disposed of through an approved waste management facility.

14. TRANSPORT INFORMATION

DOT (U.S.):

DOT Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S (COPPER OXYCHLORIDE) MARINE POLLUTANT

DOT Hazardous Class 9

DOT UN Number: UN3077

DOT Packing Group: III

DOT Reportable Quantity (lbs): Not Available.

Note: No additional remark.

Marine Pollutant: Yes.

TDG (Canada):

TDG Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S (COPPER OXYCHLORIDE) MARINE POLLUTANT

Hazard Class: 9

UN Number: UN3077

Packing Group: III

Note: No additional remark.

Marine Pollutant: Yes.

15. REGULATORY INFORMATION

U.S. TSCA Inventory Status: All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.

Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

Note: Not available.

U.S. Regulatory Rules

Ingredients	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Copper oxychloride	Not Listed.	Not Listed.	Listed

California Proposition 65: Not Listed.

MA Right to Know List: Not Listed.

New Jersey Right-to-Know List: Listed.

Pennsylvania Right to Know List: Listed.

WHMIS Hazardous Class:

WHMIS EXEMPT

Pest Control Products Act Registration No. 13245.

16. OTHER INFORMATION

Additional Information:

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Disclaimer:

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Do not use ingredient information and/or ingredient percentages in this MSDS as a product specification. For product specification information refer to a Product Specification Sheet and/or a Certificate of Analysis. These can be obtained from your local Univar Sales Office.

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END OF MSDS