

MATERIAL SAFETY DATA SHEET

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS:

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EMERGENCY TELEPHONE NUMBERS:

(800) 424-9300 (CHEMTREC, transportation and spills
toll free number USA, Canada and US Virgin Islands)
(703) 527-3887 (CHEMTREC for calls elsewhere, collect
calls are accepted)

PRODUCT NAME: COC MUP

CHEMICAL NAME & SYNONYMS: Copper (II) Chloride-Dihydroxide(1,3)

CHEMICAL FORMULA: $3\text{Cu}(\text{OH})_2 \cdot \text{CuCl}_2$

CHEMICAL FAMILY: Transition Metal Basic Halide

EPA REG. NO: 45002-6

SECTION 2. CHEMICAL COMPOSITION AND DATA ON COMPONENTS

COMPONENT: Copper Oxychloride

CAS No: 1332-65-6

% ACTIVE INGREDIENT: 98.25%

OSHA PERMISSIBLE EXPOSURE LIMIT (PEL): Copper dusts and mists -1 mg/m³.

ACGIH THRESHOLD LIMIT VALUE (TLV): Copper dusts and mists -1 mg/m³.

SECTION 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

- May be harmful if swallowed, inhaled or absorbed through skin.
- Causes severe eye irritation.
- Avoid breathing dusts or spray mist.
- Avoid contact with eyes, skin or clothing.
- KEEP OUT OF REACH OF CHILDREN.

POTENTIAL HEALTH HAZARDS:

SKIN: Prolonged or repeated contact may cause irritation.

INHALATION: Exposure to fumes and dust may cause irritation of the nose and upper respiratory tract.

Prolonged inhalation may be harmful.

INGESTION: May be harmful if swallowed.

EYES: Moderately irritating to the eyes. If not removed promptly, will injure eye tissue. Degree of injury will depend on the amount of material that gets into eye and speed and thoroughness of the first aid treatment.

POTENTIAL PHYSICAL HAZARDS: Can decompose at high temperatures forming toxic gases.

ENVIRONMENTAL HAZARDS: None known.

SECTION 4. FIRST AID MEASURES

IF IN EYES:

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

IF INHALED:

- 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 a poison control center or doctor for further treatment advice.

IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.

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- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING:

- 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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5. FIRE FIGHTING MEASURES

FLASH POINT: NA

LeL: NA

UeL: NA

FIRE OR EXPLOSION HAZARDS: Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.

EXTINGUISHING MEDIA: Proper to primary cause of fire. Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

FIRE FIGHTING INSTRUCTIONS: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam or dry chemical fire extinguishing system is preferred to prevent excessive water run off.

SPECIAL FIRE FIGHTING PROCEDURES: If Copper Oxychloride is involved in a fire, avoid breathing smoke. Use a positive-pressure, self-contained breathing air supply. Avoid getting water from fire fighting into domestic or irrigation water supplies.

HAZARDOUS COMBUSTION PRODUCTS: Hydrogen chloride, oxides of hydrogen and Copper.

SECTION 6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF THE MATERIAL IS RELEASED OR SPILLED:

Clean up spills immediately, observing precautions in Protective Equipment section. Isolate hazard area. Keep unnecessary personnel from entering.

SMALL SPILL: Vacuum or sweep up material and place in containers for reuse and disposal. Mark and store containers as hazardous waste.

LARGE SPILL: Vacuum or sweep up material and place in containers for reuse and disposal. After removal, flush contaminated area thoroughly with water. Pick up rinse material with an absorbent such as clay or sand and place in a chemical waste container for disposal.

WASTE DISPOSAL METHOD: Dispose on approved hazardous waste disposal site. Follow applicable State and Federal regulations.

SECTION 7. HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

SPECIAL SENSITIVITY (HEAT, LIGHT, MOISTURE, ETC): None.

HANDLING: Use only in a well-ventilated area. Minimize dust generation and accumulation.

STORAGE: Store in a well-ventilated, dry place away from acids and ammonia. Store in a cool, clean area, away from heat and other sources of ignition. Keep away from food, feed and drinking water.

SECTION 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Some materials that are chemical-resistant to this product are any waterproof material. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

1. Coveralls over short-sleeved shirt and short pants
2. Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
3. Chemical-resistant footwear plus socks
4. Protective eyewear
5. Chemical-resistant headgear for overhead exposure
6. Chemical-resistant apron when cleaning equipment, mixing, or loading

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS:

1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
2. Remove clothing if product gets inside. Then wash thoroughly and put on clean clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**PHYSICAL STATE:** Solid (very fine powder)**ODOR:** None.**VAPOR PRESSURE (25 °C):** NA**MOLECULAR WEIGHT:** 427.16**COLOR:** Pale Green**BULK DENSITY:** 31-35 lb/ft³**Ph:** 7 (in water)**VAPOR DENSITY (AIR = 1):** NA**MELT POINT:** NA**SPECIFIC GRAVITY:** NA**WATER SOLUBILITY (25 °C):** Insoluble**BOILING POINT:** NA (Decomposes 220 °C)**% VOLATILE BY VOLUME:** <1%**FREEZING POINT:** NA**SECTION 10. STABILITY AND REACTIVITY****STABILITY:** Stable. However may decompose if heated.**CONDITIONS TO AVOID:** Temperatures over 125 °F. Avoid exposure to high moisture conditions for prolonged periods.**POLYMERIZATION:** Does not polymerize.**INCOMPATIBILITY (MATERIALS TO AVOID):** Ammonia or acid vapors. Strong acids. Copper is corrosive to aluminum, especially when in aqueous state and elevated temperatures.**HAZARDOUS DECOMPOSITION:** Decomposes in high temperature to hydrogen chloride and oxides of hydrogen and copper .**SECTION 11. TOXICOLOGICAL INFORMATION****OSHA PERMISSIBLE EXPOSURE LIMIT (PEL):** Copper dusts and mists -1 mg/m³.**ACGIH THRESHOLD LIMIT VALUE (TLV):** Copper dusts and mists -1 mg/m³.**ACUTE TOXICITY:****LD₅₀ ORAL (Rats):** 1,000 mg/kg**LD₅₀ DERMAL (Rats):** >2,000 mg/kg**LC₅₀ INHALATION (rabbit):** >2,000 mg/m³**EYE IRRITATION (rabbit):** Severe**SKIN IRRITATION (rabbit):** Slight**SENSITIZATION (guinea pig):** Non sensitizing.**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Acute asthma and/or other chronic pulmonary diseases due to inhalation of dust or spray mists.**CARCINOGEN STATUS:****OSHA:** Not listed**NTP:** Not listed**IARC:** Not listed**MUTAGENIC DATA:** No evidence of effects during *in vivo* or *in vitro* studies.**ADDITIONAL DATA:** Not known to exhibit reproductive or teratogenic (birth defect) effects.

SECTION 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: This product is toxic to fish and aquatic organisms. Do not apply directly to water, or to areas where surface water is present. Do not contaminate water when disposing of equipment washwaters.

FISH TOXICITY: (Technical)

FISH LC₅₀ (as 100% active): Unknown

FISH LC₅₀ (as 100% active): Unknown

AVIAN TOXICITY: (Technical)

ORAL LD₅₀ (Bobwhite quail): Unknown

ORAL LD₅₀ (Mallard duck): Unknown

BEE TOXICITY: Non toxic.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE: Product wastes are Toxic. Dispose in accordance with applicable Federal, State and Local laws and regulations.

CONTAINER: Refer to product label.

SECTION 14. TRANSPORT INFORMATION

DOT SHIPPING DESCRIPTION: Agricultural fungicides, Solid, N.O.I.B.N.

UN NUMBER: None

DOT HAZARD CLASS: Not Regulated.

D.O. T. LABELS/PLACARDS REQUIRED: None required.

DOT EMERGENCY RESPONSE GUIDE #: NA

SECTION 15. REGULATORY INFORMATION

FIFRA: All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act. The regulatory information presented below is pertinent only when this product is handled outside the normal use and application as a pesticide.

OSHA HAZARD COMMUNICATION STANDARD STATUS: Regulated

SARA TITLE III:

Sec. 302- 304 (40 CFR 350): Not listed.

Extremely Hazardous Substance (EHS): Not applicable.

Reportable Quantity (RQ) (CERCLA): None

Sec. 312 Reporting (40 CFR 370):

SARA/OSHA Hazardous Chemical reporting Quantity is 10,000 pounds.

Reporting Status: Mixture, solid.

Reporting Hazards: Acute.

Sec. 313 Reporting (40 CFR 372): Not listed.

RCRA Hazardous Waste: Not listed.

SECTION 16. OTHER INFORMATION

DISCLAIMER: The information presented herein is based on available data from reliable sources and is correct to the best of Albaugh, Inc.'s knowledge. Albaugh, Inc. makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

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Revision

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