

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS: ALBAUGH, LLC
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EMERGENCY TELEPHONE NUMBERS:
(800) 424-9300 (CHEMTREC, transportation and spills)

PRODUCT NAME : COC 50 DF
CHEMICAL NAME : Copper Oxychloride
PRODUCT USE : Fungicide
PRODUCT CODE : EPA Reg. No 45002-17

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

Light green powder

HEALTH HAZARDS: Can cause moderate eye irritation.

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

ENVIRONMENTAL HAZARDS: None known.

**SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS**

COMPONENT	PERCENTAGE	CAS NUMBER
Copper Oxychloride	86.2%	1332-65-6

SECTION 4 - FIRST AID MEASURES

First Aid responders should use protective equipment in Section 8 if there is a potential for exposure to product.

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. 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.

NOTE TO PHYSICIAN: No known antidote, treat symptomatically.

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

SECTION 5 - FIRE FIGHTING MEASURES

National Fire Protection Rating (NFPA)

HEALTH	1
FLAMMABILITY	1
REACTIVITY	1
4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal	

FLASHPOINT: Will not flash

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

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

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.

FIRE FIGHTING EQUIPMENT: 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.

Minimize use of water to prevent environmental contamination

SECTION 6 - ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILLS OR LEAKS: Clean up spills immediately, observing precautions in Section 8 of this document. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

SMALL SPILL: Vacuum or sweep up material and place in a container for reuse or disposal.

LARGE SPILL: Avoid creating dust cloud. Vacuum or sweep up material and place in a container for reuse or disposal. Reduce airborne dust and prevent scattering by moistening with water. Pick up wash liquid with additional absorbent and place in a disposable container. After removal, flush contaminated area thoroughly with water.

This material should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Minimize use of water to prevent environmental contamination

SECTION 7 - HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling concentrate.

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

EXPOSURE LIMITS (8 hour TWA, mg/m³):

COMPONENT	OSHA PEL	ACIGH TLV
Copper oxychloride (as Cu)	1.0	1.0

ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product to avoid exposure to airborne contaminants above the exposure limit. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

PERSONAL PROTECTIVE EQUIPMENT: Mixers, loaders, applicators and other handlers must wear the following:

1. Long-sleeved shirt and long pants
2. Chemical resistant gloves made of any waterproof material
3. Shoes plus socks
4. Protective eyewear such as face shield or goggles

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, PVC and viton. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

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/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light green powder
Odor:	None
pH:	6.2 – 7.2
Melting Point:	Not applicable
Boiling Point:	No data
Flash Point:	Will not flash
Evaporation Rate:	No data
Flammability:	Not flammable
Flammability Limits:	Not applicable
Vapor Pressure:	Negligible at 20°C
Vapor Density:	Not applicable
Density:	0.65 – 0.69 g/ml (5.47 – 5.76 lb/gl)*
Solubility:	Emulsifies
Partition Coefficient:	No data
Auto-Ignition Temperature:	No data
Decomposition Temperature:	No data
Viscosity:	Not applicable

*Listed density is an approximate value and does not necessarily represent that of a specific batch.

SECTION 10 - STABILITY AND REACTIVITY

PRODUCT REACTIVITY: Copper is corrosive to aluminum, especially when in aqueous state and elevated temperatures.

CHEMICAL STABILITY: Stable. However may decompose if heated.

HAZARDOUS REACTION/POLYMERIZATION: Does not polymerize.

CONDITIONS TO AVOID: Temperatures over 125°F. Avoid exposure to high moisture conditions for prolonged periods.

INCOMPATIBLE MATERIALS: Ammonia or acid vapors, strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposes in high temperature to hydrogen chloride and oxides of hydrogen and copper.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral LD ₅₀ (rat)	- >5000 mg/kg
Dermal LD ₅₀ (rat)	- >5000 mg/kg
Inhalation LC ₅₀ (rat)	- >2.04 mg/L
Eye Irritation (rabbit)	- Mildly irritating
Skin Irritation (rabbit)	- Slightly irritating
Sensitization (guinea pig)	- Not a contact sensitizer

CARCINOGEN STATUS:

OSHA	- Not listed
NTP	- Not listed
IARC	- Not listed

TERATOGENICITY: Not known to exhibit reproductive or teratogenic (birth defect) effects

MUTAGENICITY: No evidence of effects during in vivo or in vitro studies.

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.

FATE: Copper oxychloride breaks down to metallic copper which is a chemical element and cannot be further degraded.

FISH TOXICITY: (technical)

96 hour LC ₅₀ , Rainbow trout –	Unknown
96 hour LC ₅₀ , Bluegill –	Unknown

AVIAN TOXICITY: (technical)

Oral LD ₅₀ , Bobwhite quail –	Unknown
Oral LD ₅₀ , Mallard duck -	Unknown

BEE TOXICITY: (technical) - Unknown

SECTION 13 - DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Completely empty container into application equipment by shaking and tapping sides and bottom to loosen clinging particles. When completely empty, offer for recycling if available, or dispose of empty bag in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Refer to the product label for additional and complete Container Handling instructions

SECTION 14 - TRANSPORT INFORMATION

SHIPPING DESCRIPTION: Agricultural fungicides, Solid, N.O.I.B.N.
(Ground transport)

TRANSPORT HAZARD CLASS: N/A
UN NUMBER: N/A
DOT PACKING GROUP: PG III

SECTION 15 - REGULATORY INFORMATION

CERCLA REPORTABLE QUANTITY: Not listed

SARA TITLE III STATUS:
311/312 Hazard Categories – Acute Health
313 Toxic Chemicals – Not listed

CALIFORNIA PROP 65: Not listed

TSCA: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SECTION 16 - OTHER INFORMATION

HMIS HAZARD RATINGS	HEALTH	1
	FLAMMABILITY	1
	PHYSICAL HAZARD	0
	4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal	

DISCLAIMER: The information presented herein is based on available data from reliable sources and is correct to the best of Albaugh's knowledge. Albaugh 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.

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling.

It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

REVISED DATE: November, 2014

REFERENCE: Revised for GHS compliance