

MATERIAL SAFETY DATA SHEET

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS:

ALBAUGH INC.
121 NE 18th Street
Ankeny, IA 50021
(800) 247-8013

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: NU COP 3L**CHEMICAL NAME & SYNONYMS:** Copper (II) Hydroxide, Cupric Hydroxide**CHEMICAL FORMULA:** Cu(OH)₂**CHEMICAL FAMILY:** Weak base of transition metal**EPA REG. No:** 42750-75

SECTION 2. CHEMICAL COMPOSITION AND DATA ON COMPONENTS

COMPONENT: Copper Hydroxide**CAS No:** 20427-59-2**% ACTIVE INGREDIENT:** 37.5% (24.4% of Copper Content)**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:** Mild temporary irritant. Prolonged or repeated contact may cause irritation.**INHALATION:** Moderately irritating to respiratory tract. Prolonged inhalation may be harmful.**INGESTION:** May be harmful if swallowed.**EYES:** Severely irritating to the eyes. If not removed promptly, will injure eye tissue, which may result in permanent damage.**POTENTIAL PHYSICAL HAZARDS:** Can decompose at high temperatures forming toxic gases.**ENVIRONMENTAL HAZARDS:** Toxic to wild life and domestic animals.

SECTION 4. FIRST AID MEASURES

IF IN EYES: Hold eye lids open and flush with a steady, gently stream of water for 15 min. Get medical attention.**IF SWALLOWED:** Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, large quantities of water. Avoid alcohol.**Note to Physician:** Probable mucosal damage may contraindicate use of gastric lavage.**IF INHALED:** Remove victim to fresh air. Get medical attention.**IF ON SKIN:** Wash thoroughly with soap and water. Get medical attention if irritation persists.

SECTION 5. FIRE FIGHTING MEASURES

FLASH POINT: Will not flash

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 Hydroxide 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: Oxides of 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. Absorb in sand, clays or other absorbent materials, form dikes to avoid spreading. Recover and contain as much free liquid as possible for reuse. Allow any absorbed material to solidify, and scrape up for disposal. Mark and store containers as hazardous waste. After removal, flush contaminated area thoroughly with water.

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!

STORAGE TEMPERATURE: Below 125 °F

AVERAGE LIFE: Five years under normal storage conditions.

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

HANDLING: Use only in a well-ventilated area. Do not reuse containers.

STORAGE: Store in a well-ventilated, away from strong acids and ammonia. Store in a cool, clean area. Keep away from food. Keep container closed when not in use. Keep from freezing.

SECTION 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Applicators and other handlers must wear:

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

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, 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 immediately if product gets inside. Then wash thoroughly and put on clean clothing.
3. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Albaugh, Inc believes that the data contained herein is factual. This data is not to be taken as a Warranty or Representation of legal responsibility. It is offered solely for your consideration, investigation & verification.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Thick liquid
ODOR: None.
VAPOR PRESSURE (25 °C): NA
MOLECULAR WEIGHT: 97.56
COLOR: Blue green
BULK DENSITY: 1.45 (12.13 lbs/gal)
Ph: 6.0 (1% w/w in water)

VAPOR DENSITY (AIR = 1): NA
MELT POINT: Decomposes 125 °C
SPECIFIC GRAVITY: NA
WATER SOLUBILITY (25 °C): Dispersible
BOILING POINT: NA
% 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 CuO +H₂O.

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): 1,200 mg/kg

LD₅₀ DERMAL (Rats): >2,000 mg/kg

LC₅₀ INHALATION (Rabbit): > 2,000 mg/m³

EYE IRRITATION (rabbit): Severe, corrosive.

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 wash waters.

FISH TOXICITY: (Technical)

FISH LC₅₀ (as 100% active): Blue Gill 180 ppm/96 hrs.

FISH LC₅₀ (as 100% active): Rainbow Trout 25 ppm/96 hrs.

AVIAN TOXICITY: (Technical)

ORAL LD₅₀ (Bobwhite quail): 3,400 mg/kg.

ORAL LD₅₀ (Mallard duck): > 5,000 mg/kg.

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

UN NUMBER: None

DOT HAZARD CLASS: Not Regulated

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

FREIGHT CLASSIFICATION: Copper Hydroxide, solid, N.O.I (NMFC Item 102120)

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): Copper -5,000 pounds.

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

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

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Prepared by: Juan M. Becerra
Reviewed by: Juan M. Becerra
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Approved by: Pablo Diaz
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