

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS: ALBAUGH, LLC
Ankeny, IA 50021

EMERGENCY TELEPHONE NUMBERS:
(800) 424-9300 (CHEMTREC, transportation and spills)

PRODUCT NAME : **BASIC COPPER 53**
CHEMICAL NAME : Basic copper sulfate
PRODUCT USE : Fungicide
PRODUCT CODE : EPA Reg. No 45002-8

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

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

Green solid powder

HEALTH HAZARDS: Severely irritating to eyes.**PHYSICAL HAZARDS:** Can decompose at high temperatures forming toxic gases.**ENVIRONMENTAL HAZARDS:** Toxic to aquatic life.**SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS**

COMPONENT	PERCENTAGE	CAS NUMBER
Basic copper sulfate	98.0% (53% Copper metal)	1344-73-6
Other ingredients	2.0%	n/a

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 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.**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.**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

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: N/A

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 runoff. Minimize use of water to prevent environmental contamination. Contact your State Pesticide or Environmental Control Agency, or nearest EPA Regional Office for guidance on disposal.

FIRE FIGHTING EQUIPMENT: Use a positive-pressure, self-contained breathing air supply.

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: Keep in a cool place. Do not store at temperatures below 32°F. Open dumping is prohibited. Do not reuse empty container.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**EXPOSURE LIMITS (8 hour TWA, ppm):**

COMPONENT	OSHA PEL	ACIGH TLV
Basic copper sulfate	Not listed*	Not listed

*OSHA Z-1 Table lists 1 mg/m³ TWA for metallic copper dusts and fumes

ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product to minimize exposure to airborne contaminants. Facilities storing or utilizing this material should be equipped with an eyewash facility and 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

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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

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:

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:	Green solid powder
Odor:	None
pH:	6.6 – 7.6
Melting Point:	>213°C (Decomposition temperature)
Boiling Point:	Not applicable
Flash Point:	Not applicable
Evaporation Rate:	Not applicable
Flammability:	Not flammable
Flammability Limits:	No data
Vapor Pressure:	No data
Vapor Density:	Not applicable
Density:	0.66 – 0.70 g/ml (5.51 – 5.84 lb/gl)*
Solubility:	107 ppm (water)
Partition Coefficient:	No data
Auto-Ignition Temperature:	No data
Decomposition Temperature:	213°C
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: None known

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: Acidic conditions and materials, ammonia. Copper is corrosive to aluminum and iron, especially when in aqueous state and at elevated temperatures.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, oxides of hydrogen and copper.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute toxicity values from a similar but not identical formulation.

ACUTE TOXICITY:**ACUTE TOXICITY:**

Oral LD ₅₀ (rat)	1,502 mg/kg female
Dermal LD ₅₀ (rat)	>2,000 mg/kg
Inhalation LC ₅₀ (rat)	>1.06 mg/L
Eye Irritation (rabbit)	Severely 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 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.

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

FISH TOXICITY: (technical)

96 hour LC ₅₀ , Rainbow trout –	110 ppm
96 hour LC ₅₀ , Bluegill –	unknown

AVIAN TOXICITY: (technical)Oral LD₅₀, Bobwhite quail – UnknownOral LD₅₀, 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 paper or plastic bag, fiber sack or drum liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residues into application or formulation equipment. Then offer for recycling if available or dispose of empty paper or plastic bag, fiber sack or fiber drum and liner in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

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

SECTION 14 - TRANSPORT INFORMATION**SHIPPING DESCRIPTION:**

(Ground transport)

Not regulated by DOT

TRANSPORT HAZARD CLASS:

N/A

UN NUMBER:

N/A

DOT PACKING GROUP:

PG III

SECTION 15 - REGULATORY INFORMATION**CERCLA REPORTABLE QUANTITY:**

5,000 lbs (as copper metallic)

SARA TITLE III STATUS:

311/312 Hazard Categories –

313 Toxic Chemicals –

Acute Health

Copper compound

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: December, 2014

REFERENCE: Revised for GHS compliance