

# MATERIAL SAFETY DATA SHEET

ZINC-COPPER SPRAY 25%-25%

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Issue Date: 12/99

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Chemical Product

ZINC-COPPER SPRAY 25%-25%

EPA Reg. No. 17545-7

Common Name: Powdered copper-based fungicide.

Chemical Description: Basic Copper Sulfate/Zinc Oxysulfate mixture.

TSCA/CAS No.: This product is a mixture — there is no specific CAS number.

### Manufactured For

Monterey Chemical Company

P. O. Box 35000

Fresno, CA 93745-5000

### Emergency Phone Numbers

Emergency Telephone: DAYS: (559) 499-2100 EVES.: (559) 431-7390

CHEMTREC (24-Hour Emergency Number): (800) 424-9300

EPA National Response Center: (800) 424-8802

## SECTION 2. HAZARDOUS INGREDIENTS

CHEMICAL	CAS NO.	%	TLV OR PEL	RQ(lbs)
Basic Copper Sulfate (Copper, as metallic, 53%)	1344-73-6	47.1	†	N.P.*
Zinc Oxysulfate	12600-80-5	52.9	N.P.	N.P.

† OSHA Regulations (29 CFR 1910.1000) list the 8 hour TLV for copper dusts as 1 mg/m<sup>3</sup>.

\* N.P. - Not pertinent.

## SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Odorless, blue-green powder. Dust mildly irritating to eyes or if inhaled. Fire may produce poisonous gases. Stay upwind of smoke. Contain any liquid runoff. Toxic to fish and aquatic organisms. Not D.O.T. regulated.

HEALTH: 2 REACTIVITY: 0 FLAMMABILITY: 0 ENVIRONMENT: 0

(0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme)

## SECTION 4. FIRST AID

Eyes: Immediately flush eyes with water for at least 15 minutes. Get medical attention if irritation persists.

Skin: Remove contaminated clothes and shoes and immediately wash skin with soap and plenty of water. Get medical attention if irritation persists.

Ingestion: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

Inhalation: If adverse symptoms are experienced, move to fresh air. If breathing becomes difficult, see a physician.

SECTION 5.	FIRE AND EXPLOSION HAZARDS
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Flash Point:	Noncombustible.
Test Method:	Not pertinent.
LEL Flammable Limits:	Not pertinent.
UEL Flammable Limits:	Not pertinent.
Autoignition Temperature:	Not pertinent.
Flammability Classification:	Noncombustible.
Known Hazardous Products of Combustion:	Thermal decomposition may produce toxic sulfur oxide fumes.
Properties that Initiate/Contribute to Intensity of Fire:	None.
Potential For Dust Explosion:	None.
Reactions that Release Flammable Gases or Vapors:	None known.
Potential For Release of Flammable Vapors:	None.
Unusual Fire & Explosion Hazards:	Sulfur dioxide fumes at temperatures $\geq$ 300°C.
Extinguishing Media:	Not pertinent.
Special Firefighting Procedures:	Avoid use of water or foam to prevent spread of contamination. Stay upwind of smoke. Wear positive pressure, self-contained breathing apparatus and goggles. Contain any liquid runoff.

SECTION 6.	SPILLS AND LEAKS
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Containment:	Product is toxic to aquatic organisms. Prevent product spillage from entering drinking water supplies or streams.
Clean Up:	Recover dry powder if possible. Do not wash away. If wetted, collect liquid or absorb onto absorbent material. Package spillage for disposal according to local, state and federal regulations.
Evacuation:	Not necessary but restrict entry.

SECTION 7.	STORAGE AND HANDLING
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Storage:	Store in original container in a cool, dry place. Do not re-use bag.
Transfer Equipment:	Transfer product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc.
Work/Hygienic Practices:	May cause temporary eye irritation. Harmful if absorbed through the skin or inhaled. May cause skin sensitization reactions in certain individuals. Avoid contact with eyes, skin, or clothing. Avoid breathing dust or mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Keep out of lakes, streams or ponds—this product is toxic to fish.

SECTION 8.	PERSONAL PROTECTIVE EQUIPMENT
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Eyes:	Protective eyewear.
Skin:	Long pants, long-sleeved shirts, and waterproof gloves and shoes plus socks.
Respiratory:	For dust, or if use generates an aerosol mist or respiratory irritation, use NIOSH-approved (TC-21C) dust/mist respirator (such as 3M #8710).
Ventilation:	OSHA Regulations (29 CFR 1910.1000) lists the 8 hour TLV for copper dusts as 1 mg/m <sup>3</sup> .

**SECTION 9. PHYSICAL AND CHEMICAL DATA**

Appearance:	Blue-green powder.
Odor:	None.
pH:	6.96
Vapor Pressure:	Not pertinent.
Vapor Density (Air = 1):	Not pertinent.
Boiling Point:	Not pertinent.
Freezing Point:	Not pertinent.
Water Solubility:	Insoluble.
Density:	60.5 lb./ft. <sup>3</sup>
Evaporation Rate (butyl acetate = 1):	Not pertinent.
Viscosity:	Not pertinent.
% Volatile:	Not pertinent.
Octanol/Water Partition Coefficient:	Not pertinent.
Saturated Vapor Concentration:	Not pertinent.

**SECTION 10. STABILITY AND REACTIVITY**

Stability:	Stable.
Conditions To Avoid:	None known.
Incompatibility:	Avoid contact with strong acids.
Hazardous Decomposition Products:	Sulfur dioxide at temperatures above 300°C.
Hazardous Polymerization:	Will not occur.

**SECTION 11. POTENTIAL HEALTH EFFECTS**Acute Effects:

Eyes:	Mild irritant. May cause redness and burning.
Skin:	Mild irritant, especially from prolonged exposure. May cause redness and/or chaffing.
Ingestion:	Slightly toxic. May cause stomach cramps and/or nausea.
Inhalation:	Inhalation of dust may cause mild irritation of nasal mucous membranes. May cause dry coughing or wheezing.

Subchronic Effects: None known.Chronic Effects: None known.**SECTION 12. ECOLOGICAL INFORMATION**

Algal/Lemna Growth Inhibition:	Acutely toxic.
Toxicity to Fish and Invertebrates:	Acutely toxic.
Toxicity to Plants:	High concentration causes foliar spotting and burn.
Toxicity in Birds:	Acute toxicity; slight.

**SECTION 13. DISPOSAL**

Do not contaminate lakes, streams, ponds, estuaries, oceans or other waters by discharge of waste effluents or equipment washwaters. Dispose of waste effluents according to state and local regulations. Also, chemical additions or other alterations of this product may invalidate any disposal information in this MSDS. Therefore, consult local waste regulators for proper disposal. Do not discharge.

SECTION 14.           TRANSPORTATION
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PROPER SHIPPING DESCRIPTION:	Not D.O.T. Regulated.
Other Shipping Information:	Insecticides or Fungicides, Agricultural, Dry. NMFC Item 102120, LTL Class 60

SECTION 15.           REGULATORY INFORMATION
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CERCLA: None.

SARA TITLE III, Section 313 Toxic Chemicals: Copper compounds (47.1%).

PROPOSITION 65: ATTENTION: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

SECTION 16.           OTHER
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All information appearing in this document was based on data provided by third party sources and was compiled to comply with the Federal Hazard Communication Standard and the California Hazardous Substances Information and Training Act. The information is believed to be accurate as of the preparation date, but is not warranted as being the final authority in the use of this product. This information does not purport to be legal or medical advice.