

# MATERIAL SAFETY DATA SHEET

MONOPLEX PLUS 2

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Issue Date: 1/02

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Chemical Product

MONOPLEX PLUS 2

Common Name: Fertilizing compound, dry.

Chemical Description: Boron, Copper, Manganese and Zinc lignosulfonate complex, granule.

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)
Copper sulfate pentahydrate	7758-99-8			
Containing copper sulfate	7758-98-7	7.1	1.0 mg/m <sup>3</sup> Dust/mist as copper	10 lbs.
Manganese sulfate, monohydrate	10034-96-5	10.0	5 mg/m <sup>3</sup> (as Mn) OSHA,ACGIH (1980)	N.P.*
Sodium tetraborate, pentahydrate	12179-04-3	10.0	10 mg/m <sup>3</sup> (total dust) OSHA PEL 1 mg/m <sup>3</sup> (total dust) ACGIH TLV	N.P.*
Zinc sulfate, monohydrate	7446-19-7			
Containing zinc sulfate	7733-02-0	14.0	*N.A.	1,000

\*N.A. - Not Applicable

N.P. – Not Pertinent

## SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Brownish granule with slight odor. Avoid strong oxidizing agents. Toxic sulfur dioxide fumes may be generated at high temperatures. D.O.T. regulated in packages over 140 pounds.

HEALTH: 1 REACTIVITY: 1 FLAMMABILITY: 0 ENVIRONMENT: 1  
(0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme)

## SECTION 4. FIRST AID

Eyes: Flush immediately with water for at least 15 minutes. Call a physician if eye irritation persists.

Skin: Wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. See a physician if skin becomes irritated.

Ingestion: If conscious and alert, drink water or milk to dilute, then induce vomiting. Call a physician or Poison Control Center immediately.

Inhalation: Move to fresh air. If breathing becomes difficult, call 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:	None.
Properties that Initiate/Contribute to Intensity of Fire:	None.
Potential For Dust Explosion:	None.
Reactions that Release Flammable Gases or Vapors:	None.
Potential For Release of Flammable Vapors:	None.
Unusual Fire & Explosion Hazards:	Toxic sulfur dioxide fumes may be generated at high temperatures.
Extinguishing Media:	Water, CO <sub>2</sub> , or foam.
Special Firefighting Procedures:	Wear positive pressure, self-contained breathing apparatus and goggles. Contain any liquid runoff.

SECTION 6.	SPILLS AND LEAKS
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Containment:	Prevent product spillage from entering drinking water supplies or streams.
Clean Up:	Sweep up and use according to labeling or package for disposal.
Evacuation:	Not necessary.

SECTION 7.	STORAGE AND HANDLING
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Storage:	Store in a cool, dry place away from children and other food and feed products. Do not contaminate other stored products or the storage area by handling or storage of this product.
Transfer Equipment:	Transfer solutions of product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc.
Work/Hygienic Practices:	Keep out of reach of children. Harmful if swallowed or inhaled. Avoid breathing vapors or spray mist. Avoid contact with eyes, skin and clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

SECTION 8.	PERSONAL PROTECTIVE EQUIPMENT
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Eyes:	Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, do not wear contact lenses when handling.
Skin:	Impervious gloves and clothes.
Respiratory:	Not normally needed. If use generates an aerosol mist or respiratory irritation, use NIOSH-approved dust/mist respirator (such as 3M #8710).
Ventilation:	Recommended but no TLV established.

**SECTION 9. PHYSICAL AND CHEMICAL DATA**

Appearance:	Brownish granule.
Odor:	None.
pH:	Not available.
Vapor Pressure:	Not available.
Vapor Density (Air = 1):	Not available.
Boiling Point:	Not available.
Freezing Point:	Not available.
Water Solubility:	Not available.
Density:	Not available.
Evaporation Rate:	Not available.
Viscosity:	Not available.
% Volatile:	Not available.
Octanol/Water Partition Coefficient:	Not available.
Saturated Vapor Concentration:	Not available.

**SECTION 10. STABILITY AND REACTIVITY**

Stability:	Stable.
Conditions To Avoid:	Strong oxidizing agents.
Incompatibility:	None known.
Hazardous Decomposition Products:	Toxic sulfur dioxide fumes may be generated at high temperatures.
Hazardous Polymerization:	Will not occur.

**SECTION 11. POTENTIAL HEALTH EFFECTS**

<u>Acute Effects:</u>	
Eyes:	May cause irritation.
Skin:	May cause irritation, especially from prolonged exposure.
Ingestion:	Large amounts may be harmful.
Inhalation:	Respiratory problems could be aggravated by inhalation of dust.
<u>Subchronic Effects:</u>	None known.
<u>Chronic Effects:</u>	None known.

**SECTION 12. ECOLOGICAL INFORMATION**

Algal/Lemna Growth Inhibition:	Not known.
Toxicity to Fish and Invertebrates:	Not known.
Toxicity to Plants:	Not known.
Toxicity in Birds:	Not known.

**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**

D.O.T.:	≤ 140 lbs.	Not D.O.T. regulated.
	> 140 lbs.	Environmentally Hazardous Substance, Solid, N.O.S. (Cupric Sulfate), 9, UN 3077, PG III, RQ 10 lbs. ERG #171.

Other Shipping Description: Fertilizing Compounds, Manufactured, Dry, Pkgd. NMFC Item 68140 Sub 4, LTL Class 60

**SECTION 15. REGULATORY INFORMATION**

CERCLA: This product contains copper compounds, manganese sulfate and zinc sulfate, which are listed as priority pollutants under the Clean Water Act and, as such, fall under the CERCLA spill reporting requirements of 40 CFR 302.

SARA TITLE III, Section 313 Toxic Chemicals: Copper compounds (7.1%), manganese compounds (10%), zinc compounds (14%).

**SECTION 16. OTHER**

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.