

# MATERIAL SAFETY DATA SHEET

MICRO BLEND

Page 1 of 4

Issue Date: 2/04

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Chemical Product

MICRO BLEND

Common Name: Fertilizing compound, liquid.

Chemical Description: Metal sulfate blend, aqueous solution.

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	8.0		
Contributing copper sulfate	7758-98-7	5.1	1.0 mg/m <sup>3</sup> (Dust/mist as copper)	10 lbs.
Ferrous sulfate, heptahydrate	7782-63-0	2.5		
Contributing ferrous sulfate	7720-78-7	1.4	1 mg/m <sup>3</sup> (as Fe) Iron salts, soluble ACGIH TWA (1979)	1,000
Manganese sulfate, monohydrate	10034-96-5	3.1	5 mg/m <sup>3</sup> (as Mn) OSHA,ACGIH (1980)	N.P.*
Zinc sulfate, monohydrate	7446-19-7	14.1		
Contributing zinc sulfate	7733-02-0	12.7	*N.P.	1,000

\*N.P. - Not Pertinent.

## SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Dark brown liquid with slight ammonia odor. Avoid contact with eyes or skin. Do not ingest or inhale. Avoid contact with strong alkaline materials such as caustic potash (sodium hydroxide). Mildly corrosive to common metals. Oxides of sulfur and zinc and other hazardous material may be formed in a fire situation. D.O.T. regulated in packages  $\geq$  20 gallons.

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

8

## 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. 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**

Flash Point:	Not applicable.
Test Method:	Not pertinent.
LEL Flammable Limits:	Not pertinent.
UEL Flammable Limits:	Not pertinent.
Autoignition Temperature:	Not pertinent.
Flammability Classification:	Not applicable.
Known Hazardous Products of Combustion:	Oxides of sulfur and zinc and other hazardous material may be formed in a fire situation.
Properties that Initiate/Contribute to Intensity of Fire:	None.
Potential For Dust Explosion:	None.
Reactions that Release Flammable Gases or Vapors:	Not known.
Potential for Release of Flammable Vapors:	None.
Unusual Fire & Explosion Hazards:	None.
Extinguishing Media:	Does not burn or support combustion. Use appropriate media for surrounding fire.
Special Firefighting Procedures:	Wear positive pressure, self-contained breathing apparatus and goggles. Avoid smoke inhalation. Contain any liquid runoff.

**SECTION 6. SPILLS AND LEAKS**

Containment:	Prevent product spillage from entering drinking water supplies or streams.
Clean Up:	Collect liquid or absorb onto absorbent material and package for disposal. Alternatively, neutralize with dilute alkaline solution (baking soda, soda, ash or lime) and wash down sewer if federal, state and local regulations permit.
Evacuation:	Not necessary.

**SECTION 7. STORAGE AND HANDLING**

Storage:	Store in plastic or stainless steel container in a cool, well-ventilated, dry place at temperatures above 40°F and below 105°F. Do not store near food or feeds or strong alkalis. Do not stack pallets more than two (2) high.
Transfer Equipment:	Transfer product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc.
Work/Hygienic Practices:	Keep out of reach of children. Avoid contact with eyes, skin and clothing. Avoid inhalation of spray mists. Wash thoroughly with water after handling.

**SECTION 8. PERSONAL PROTECTIVE EQUIPMENT**

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:	See Section 2 for TLV information. Provide appropriate ventilation and/or respirators to control level to below TLV.

**SECTION 9. PHYSICAL AND CHEMICAL DATA**

Appearance:	Dark brown liquid.
Odor:	Slight ammonia odor.
pH:	9.42 @ 26.4°C.
Vapor Pressure:	Not available.
Vapor Density (Air=1):	Not available.
Boiling Point:	100°C (212°F)
Freezing Point:	Not available.
Water Solubility:	Approximately 98%.
Density:	10.2 lbs./gal.
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:	Excessive heat.
Incompatibility:	Strong alkaline materials such as caustic potash (sodium hydroxide). Mildly corrosive to common metals.
Hazardous Decomposition Products:	Oxides of sulfur and zinc and other hazardous material may be formed in a fire situation.
Hazardous Polymerization:	Will not occur.

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

Eyes:	May cause eye irritation.
Skin:	May cause skin irritation, especially from prolonged exposure.
Ingestion:	May result in nausea, vomiting, diarrhea, blood in vomitus and stools, burning pain in the mouth and throat, abdominal pain, lethargy, confusion, edema, leukocytosis, hyperglycemia, acidosis, shock, liver and kidney damage, and other gastrointestinal and neurological symptoms and damage. Ingestion by a child of more than 60 ml. (2 fl. oz.) or by an adult of more than 150 ml. (5 fl. oz.) may be fatal.
Inhalation:	May cause respiratory tract irritation, nausea, vomiting, weakness, fever, chills and loss of appetite. Chronic exposure may cause pneumonia, liver damage and neurological damage.

Subchronic Effects: None known.

Chronic Effects: None known.

**SECTION 12. ECOLOGICAL INFORMATION**

2Algal/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. Shipping Description:	< 20 gals.	Not D.O.T. regulated.
	≥ 20 gals.	Environmentally Hazardous Substance, Liquid, N.O.S. (Cupric Sulfate), 9, UN 3082, PG III, RQ 10 lbs. ERG #171.
Other Shipping Information:		Fertilizing Compounds (Manufactured), Liquid. NMFC Item 68140 Sub 6, LTL Class 70

**SECTION 15. REGULATORY INFORMATION**

CERCLA: This product contains copper sulfate, ferrous sulfate, manganese sulfate and zinc sulfate. Ferrous sulfate, manganese sulfate, and copper and zinc and their compounds 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 (8.0%), Manganese Compounds (3.1%), and Zinc Compounds (14.1%).

**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.