

MATERIAL SAFETY DATA SHEET

MONTEREY MICRONIZED NEUTRAL ZINC

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Issue Date: 11/99

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Chemical Product

MONTEREY MICRONIZED NEUTRAL ZINC (52% Zinc)

Common Name: Zinc oxysulfate.

Chemical Description: Zinc oxysulfate, powder, 52% zinc.

TSCA/CAS No.: The primary CAS No. is 1314-13-2.

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)
Zinc Oxysulfate	1314-13-2	90.0	N.D.*	N.A.*

* N.D. - Not Determined.

* N.P. - Not Pertinent.

SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Harmful if swallowed or inhaled. Avoid contact with eyes, skin and clothing. Avoid contamination of feed and foodstuffs. Contain any liquid runoff. Chalk-colored to pale tan powder. Reacts with acids. Sulfur dioxide fumes may be generated at temperatures above 740°C. Not D.O.T. regulated.

HEALTH: 2 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

Flash Point:	Not pertinent.
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:	Not known.
Potential For Release of Flammable Vapors:	None.
Unusual Fire & Explosion Hazards:	Sulfur dioxide fumes at temperatures $\geq 740^{\circ}\text{C}$.
Extinguishing Media:	Dry powder or CO_2 .
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: Sweep up and use according to labeling or package for disposal.

Evacuation: Not necessary.

SECTION 7. STORAGE AND HANDLING

Storage:	Store in a cool, dry place. Do not store in contact with aluminum or copper. Do not store near food or feeds. Do not stack pallets more than two (2) high.
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 dusts 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

Eyes:	Chemical dust/splash goggles to keep dust out of eyes. For solutions of product, use chemical/dust splash goggles or full-face shield. 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 approved dust/mist respirator (such as 3M Company #8710).
Ventilation:	Recommended but no TLV established.

SECTION 9. PHYSICAL AND CHEMICAL DATA

Appearance:	Chalk-colored to pale tan powder.
Odor:	None.
pH:	6.7
Vapor Pressure:	Not pertinent.
Vapor Density (Air = 1):	Not pertinent.
Boiling Point:	Not pertinent.
Freezing Point:	Not pertinent.
Water Solubility:	Forms suspension.
Density:	52.0 lbs./ft ³
Evaporation Rate:	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.
Incompatibility:	Reacts with acids.
Hazardous Decomposition Products:	Sulfur dioxide at temperatures above 740°C.
Hazardous Polymerization:	Will not occur.

SECTION 11. POTENTIAL HEALTH EFFECTSAcute Effects:

Eyes:	Mild irritant. May cause redness and burning.
Skin:	Mild irritant, especially from prolonged exposure. May cause redness.
Ingestion:	May cause stomach cramps and/or nausea.
Inhalation:	Moderate irritant of nasal mucous membranes. May cause dry coughing, wheezing or chest tightness.

Subchronic Effects: None known.

Chronic Effects: 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
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D.O.T.:	Not D.O.T. Regulated.
Other Shipping Description:	Fertilizing Compounds (Manufactured), Dry. NMFC Item 68140 Sub 4, LTL Class 60

SECTION 15.	REGULATORY INFORMATION – USA ONLY
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CERCLA: Zinc and its 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: Zinc compounds (52%).

PROPOSITION 65 (CA): WARNING: 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.