

MATERIAL SAFETY DATA SHEET

SEQUESTAR® 5% Mn CHELATE SOLUTION

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Issue Date: 12/99

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Chemical Product

SEQUESTAR® 5% MANGANESE CHELATE SOLUTION

Chemical Description: Aqueous solution of Manganese diammonium ethylenediaminetetraacetic acid
Mn(NH₄)₂EDTA

TSCA/CAS No.: The primary CAS number is 55448-20-9.

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) |
|----------|---------|---|------------|----------|
|----------|---------|---|------------|----------|

None.

SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Amber liquid with slight musty odor. Irritant to eyes and skin. Contain any liquid runoff. Not a D.O.T. regulated hazardous material.

HEALTH: 2 REACTIVITY: 0 FLAMMABILITY: 1 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 immediately.

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

Ingestion: If patient is conscious, induce vomiting. Do not induce vomiting if patient is unconscious. 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 available. |
| LEL Flammable Limits: | Not available. |
| UEL Flammable Limits: | Not available. |
| Autoignition Temperature: | Not pertinent. |
| Flammability Classification: | Noncombustible. |
| Known Hazardous Products of Combustion: | Not known. |
| 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: | Aqueous product. For fires involving dried material use water, carbon dioxide, dry chemicals 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: | Collect liquid or absorb onto absorbent material and package for disposal. |
| Evacuation: | Not necessary. |

SECTION 7. STORAGE AND HANDLING

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| Storage: | Store in plastic or stainless steel container in a cool, well-ventilated, dry place at temperatures above 40°F. Do not store in contact with brass. Do not store near food or feeds. 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

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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

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| Appearance: | Amber liquid. |
| Odor: | Slight, musty odor. |
| pH: | 7.0 |
| Vapor Pressure: | About same as water. |
| Vapor Density (Air = 1): | About same as water. |
| Boiling Point: | 217°F. |
| Freezing Point: | Not available. |
| Water Solubility: | Soluble. |
| Density: | 9.92 lbs./gal. |
| Evaporation Rate: | About same as water. |
| Viscosity: | Not available. |
| % Volatile: | About 55% as water. |
| Octanol/Water Partition Coefficient: | Not available. |
| Saturated Vapor Concentration: | Not available. |

SECTION 10. STABILITY AND REACTIVITY

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| Stability: | Stable. |
| Conditions To Avoid: | Not applicable. |
| Incompatibility: | Not applicable. |
| Hazardous Decomposition Products: | Decomposition of dry material - carbon dioxide, carbon monoxide and nitrogen oxides. |
| Hazardous Polymerization: | Will not occur. |

SECTION 11. POTENTIAL HEALTH EFFECTS

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| <u>Acute Effects:</u> | |
| Eyes: | Slight irritant. May cause redness. |
| Skin: | Slight irritant, especially from prolonged exposure. May cause redness. |
| Ingestion: | May cause stomach cramps and/or nausea. |
| Inhalation: | Severe overexposure to some manganese compounds has caused manganese pneumonia with congestion and pulmonary edema. Repeated overexposure has resulted in effects to the central nervous system including emotional disturbances. |
| <u>Subchronic Effects:</u> | None known. |
| <u>Chronic Effects:</u> | None known. |

SECTION 12. ECOLOGICAL INFORMATION

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|-------------------------------------|------------|
| 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), Liquid. NMFC Item 68140 Sub 6, LTL Class 70 |

SECTION 15. REGULATORY INFORMATION

CERCLA: None.

SARA TITLE III, Section 313 Toxic Chemicals: Manganese compounds (~ 46%).

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

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.