

# MATERIAL SAFETY DATA SHEET

MONTEREY MANG-NITE

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Issue Date: 9/03

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Chemical Product

MONTEREY MANG-NITE

Common Name: Liquid fertilizing solution.  
Chemical Description: Manganese nitrate, aqueous solution.  
TSCA/CAS No.: Primary CAS number is 10377-66-9

### 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)
Manganese nitrate	10377-66-9	45-55	0.2 mg/m <sup>3</sup> ACGIH TLV 5 mg/m <sup>3</sup> OSHA STEL (ceiling)	* N.P.

\* N.P. - Not Pertinent.

## SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Colorless to slightly pink, odorless solution. Moderate irritant of eyes, skin and other contaminated tissue. In its dry form, this product is an oxidizer, which can initiate and sustain the combustion of flammable materials. Avoid contact with flammable and combustible materials, strong reducing agents, and finely powdered metals. Extreme heat may cause Product to decompose and produce acrid vapors, manganese compounds and oxides of nitrogen). D.O.T. regulated as an oxidizer.

HEALTH: 2 REACTIVITY: 0 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. Do not rub eyes. Get immediate medical attention.

Skin: Wash thoroughly with water for at least 15 minutes. Remove contaminated clothing and wash before reuse. See medical attention if skin becomes irritated.

Ingestion: Call a physician or Poison Control Center immediately. If professional advice is not available, do not induce vomiting. Drink milk, egg whites, or large quantities of water. Never induce vomiting or give diluents to someone who is unconscious, having convulsions or unable to swallow.

Inhalation: Move to fresh air. If breathing becomes difficult, call a physician. If necessary, use artificial respiration to support vital functions.

SECTION 5.	FIRE AND EXPLOSION HAZARDS
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Flash Point:	Not flammable.
Test Method:	Not pertinent.
LEL Flammable Limits:	Not pertinent.
UEL Flammable Limits:	Not pertinent.
Autoignition Temperature:	Not flammable.
Flammability Classification:	Not flammable.
Known Hazardous Products of Combustion:	None.
Properties that Initiate/Contribute to Intensity of Fire:	In its dry form, this product is an oxidizer, which can initiate and sustain the combustion of flammable materials.
Potential For Dust Explosion:	None.
Reactions that Release Flammable Gases or Vapors:	Not known.
Potential For Release of Flammable Vapors:	Not known.
Unusual Fire & Explosion Hazards:	Product may decompose at high temperatures and produce acrid vapors, manganese compounds and oxides of nitrogen.
Extinguishing Media:	Water, foam, dry powder or CO <sub>2</sub> .
Special Firefighting Procedures:	Wear positive pressure, self-contained breathing apparatus and goggles. Avoid smoke inhalation. 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. Test the contaminated area with Starch Iodide paper. If the paper becomes discolored, rinse area with 5% sodium thiosulfate solution, followed by a triple rinse with water. Package all spill residue for proper 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 flammable materials, strong alkalis, acids, and reducing agents. 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: See Section 2 for TLV information. Provide appropriate ventilation and/or respirators to control level to below TLV.

SECTION 9.	PHYSICAL AND CHEMICAL DATA
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Appearance:	Colorless to slightly pink liquid.
Odor:	None.
pH:	Not available.
Vapor Pressure:	Not available.
Vapor Density (Air = 1):	Not available.
Boiling Point:	> 100°C (> 212°F).
Freezing Point:	-8°C (17.6°F).
Water Solubility:	Complete.
Density:	13.3 lbs./gal.
Evaporation Rate:	Similar to water.
Viscosity:	Not available.
% Volatile:	Not available.
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:	Extreme heat and contact with incompatible chemicals.
Incompatibility:	Flammable and combustible materials, strong reducing agents, finely powdered metals.
Hazardous Decomposition Products:	Manganese compounds and nitrogen oxides.
Hazardous Polymerization:	Will not occur.

SECTION 11.	POTENTIAL HEALTH EFFECTS
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Acute Effects:

Eyes: Moderate irritant. May cause irritation, pain and reddening. Severe exposure can cause conjunctivitis. Prolonged exposure may cause tissue damage, which may result in blindness.

Skin: Moderate irritant. May cause redness, moderate irritation and tissue damage. Dermatitis may result from prolonged or repeated skin contact.

Ingestion: May cause irritation and burns of the mouth, throat, esophagus and other tissues of the digestive tract immediately upon contact. Symptoms of over-exposure can include nausea, abdominal pain, vomiting and diarrhea. Severe over-exposure can result in convulsions and collapse. The nitrate component of this product may damage the oxygen transport system of the blood. Severe ingestion exposures can be fatal.

Inhalation: May cause irritation of nasal mucous membranes and upper respiratory system. Symptoms may include sneezing, coughing and difficulty breathing and are generally alleviated when overexposure ends. Severe overexposure can result in damage to respiratory system tissues.

Chronic Effects: Repeated ingestion of small amounts (as may occur with poor hygiene practices) may cause weakness, depression, headaches and mental impairment. Repeated overexposure may cause gradual brain damage. Early effects include sleepiness, weakness and poor appetite. If exposure is ended at this stage, damage may be temporary. Later effects include changes in speech, a loss of facial expression, personality changes, poor muscle coordination, changes in walking, muscle cramps, twitching and tremors. When later changes occur, some permanent brain damage can result resembling Parkinson's

disease. Additionally, high or repeated exposures may damage the kidneys and/or liver.

**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. Proper Shipping Description: Manganese Nitrate Solution, 5.1, UN 2724, PG III.  
(Placards Req. For Loads > 1,001 Lbs.) ERG #140.  
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 nitrate (45-55%).

PROPOSITION 65: 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.