

## Safety Data Sheet

# NutriSol 8% Manganese

SDS Number: 11315  
SDS Prepared: 12/15/1997  
SDS Version: 3.2  
Version Date: 10/18/2024

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** NutriSol 8% Manganese

**CHEMICAL FAMILY:** Inorganic Salt

**SYNONYMS:** Manganese

**COMMON NAME:** Liquid manganese

**EPA REGISTRATION NUMBER:** Not Regulated

**Manufactured by:**  
Coastal AgroBusiness Inc.  
PO Box 856  
Greenville, NC 27835  
Phone: 1-800-635-1388

**Emergency Telephone Numbers**  
Chemtrec (24 hours)  
1-800-424-9300  
Coastal AgroBusiness, Inc. (Weekdays – Eastern Standard Time)  
1-800-635-1388

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN – CAUTION-** Avoid contact with eyes, skin, and clothing. May be harmful if swallowed or inhaled. Do not take internally.

This product is a clear, purple liquid with a slight odor. Primary route of entry is skin contact.

### CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

#### GHS-US Classification

**STOT - Repeated Exposure Category 2**

#### LABEL ELEMENTS

#### GHS-US Labeling

#### Hazard Pictogram (GHS-US)



**GHS07**

**SIGNAL WORD (GHS-US)**

**HAZARD STATEMENTS (GHS-US)**

**WARNING**

**H373: May cause damage to organs, through prolonged or repeated exposure**

#### Precautionary Statements - Prevention

P102 - Keep out of reach of children

P202 - Do not handle until all safety precautions have been read and understood

P281 - Use personal protective equipment as required

P264 - Wash face, hands, and any exposed skin thoroughly after handling

P270 - Do not eat, drink, or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P280 - Wear protective gloves/protective clothing/ eye protection/ face protection.

### Precautionary Statements - Response

P308 + P311 - If exposed or concerned: Call a POISON CENTER or doctor

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P312 - Call a POISON CENTER or doctor if you feel unwell

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P337+P317 - If eye irritation persists: get medical help.

P330 - Rinse mouth

### Precautionary Statements - Disposal

P501 - Dispose of contents/ container to an approved waste disposal site.

### Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>PEL/TLV</u>
Manganese	8%	Proprietary	NOL/NOL
Sulfur	4.5%	Proprietary	NOL/NOL

\*Citrate complex compound derived from Manganese Sulfate (8% Manganese (Mn)).

## 4. FIRST AID MEASURES

<b>EYES:</b>	Immediately flush eyes with plenty of water for at least fifteen minutes, holding eyelids apart to ensure flushing of the entire eye surface. Do not let victim rub eyes. Seek medical attention.
<b>SKIN:</b>	Remove contaminated clothing and wash with large amounts of soap and water. If irritation develops, contact a physician.
<b>INGESTION:</b>	Give large amounts of water and induce vomiting. Get immediate medical attention. Never induce vomiting or give anything by mouth to an unconscious person.
<b>INHALATION:</b>	Remove person from area of exposure. Give artificial respiration if necessary. If breathing is difficult, give oxygen if qualified operator is available. Seek immediate medical attention.

## 5. FIRE FIGHTING MEASURES

<b>FLASH POINT (°F/Test Method):</b>	>200°F
<b>FLAMMABLE LIMITS (LFL &amp; UFL):</b>	Not determined
<b>EXTINGUISHING MEDIA</b>	Foam, CO <sub>2</sub> , Dry Chemical, and Water; Class BC, ABC Fire Extinguisher
<b>HAZARDOUS COMBUSTION PRODUCTS:</b>	May include oxides of carbon, sulfur, and metals.
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b>	Self-contained positive pressure breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Clear fire area of unprotected personnel. Cool fire exposed containers with water. Attack from upwind.
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS:</b>	None known

## 6. ACCIDENTAL RELEASE MEASURES

### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

**Small spills:** Soak up with absorbent and sweep or shovel into a suitable container for recovery or disposal.

**Large Spills:** Control and contain. Dike the spill to minimize contaminated area and facilitate salvage or disposal. Recover material for use, reprocessing, or disposal.

**CAUTION:** Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

## 7. HANDLING AND STORAGE

**HANDLING:** Use with adequate ventilation. Avoid prolonged or repeated contact with skin. Wash thoroughly with soap and water after handling. Wash hands before breaks and at the end of work.

**STORAGE:** Keep container closed when not in use. Keep from freezing.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**THRESHOLD LIMIT VALUE:** NOL

**PERMISSIBLE EXPOSURE LIMIT:** NOL

### LIMIT:

**SIGNS AND SYMPTOMS OF EXPOSURE:** Irritation of skin and eyes. Contact with eyes is painful and irritating. Overexposure: Prolonged skin contact may cause moderate irritation

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** Preexisting eye and skin disorders may be aggravated by exposure to this product. Unnecessary exposure to this product or any chemical should be avoided.

**PRIMARY ROUTES OF ENTRY:** Dermal

**ENGINEERING CONTROLS:** Use adequate exhaust ventilation to prevent inhalation of product vapors.

**RESPIRATORY PROTECTION:** None required with adequate ventilation. Use NIOSH-approved respiratory protection equipment in misty conditions exist.

**EYE PROTECTION:** Avoid contact with eyes. Wear full face shield or chemical splash goggles when handling. Do not wear contact lenses.

**SKIN PROTECTION:** Avoid contact with skin. USDA accepted nitrile or neoprene rubber gloves are recommended. Wear appropriate clothing to prevent repeated or prolonged skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE AND ODOR:** Clear/purple liquid: slight odor

**SPECIFIC GRAVITY: (Water=1):** 1.258

**VAPOR PRESSURE:** 0.2 mm Hg

**VAPOR DENSITY (Air = 1):** 2.5

**% VOLATILITY (V/V):** 35%

**BOILING POINT:** >200°F

**MELTING POINT:** Not determined

**SOLUBILITY:** Completely miscible in water

**pH:** 8.5 (10% aqueous solution)

**VISCOSITY @ 20°C:** ≈2.2 cps @ 25°C

**Note:** These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable

**CONDITIONS TO AVOID:** Extreme Temperatures (above 250°C)

**INCOMPATIBILITY:** Strong organic acids and oxidizing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS:** May form carbon dioxide, carbon monoxide, nitrogen compounds, and oxides of manganese and sulfur.

**HAZARDOUS POLYMERIZATION:** Will not occur

## 11. TOXICOLOGICAL INFORMATION

**ACUTE ORAL LD<sub>50</sub>:** None

**EYE IRRITATION:** Moderate

**INHALATION LC<sub>50</sub>:** May irritate nasal passages and upper respiratory tract.

**CARCINOGENETIC POTENTIAL:** This product is not carcinogenic teratogenic or mutagenic as determined by OSHA, NTP, or IARC. Danger of methemoglobin formation.

**ACUTE DERMAL LD<sub>50</sub>:** No data available

**SKIN IRRITATION/SENSITIZATION:** Mild (Prolonged exposure)

**SPECIFIC TARGET ORGAN TOXICITY - REPEATED OR PROLONGED EXPOSURE** May cause damage to organs, through prolonged or repeated exposure (Manganese Sulfate).

## 12. ECOLOGICAL INFORMATION

No data available

## 13. DISPOSAL CONSIDERATIONS

Do not reuse container. Place in trash or offer for recycling. Incinerate contaminated solids in accordance with local, state, and federal regulations.

**Waste Disposal Methods:** Dispose of in accordance with Local, State, and Federal regulations. Incineration in an authorized and permitted thermal treatment facility or chemical or biological treatment in authorized and permitted treatment facilities is recommended. Material collected with absorbent may be disposed of in a permitted landfill in accordance with Federal, State, and Local regulations. Triple rinse container and dispose of in accordance with all Local, State, and Federal regulations or offer for recycling.

## 14. TRANSPORTATION INFORMATION

**D.O.T. Shipping Description:** NOT REGULATED BY DOT BY HIGHWAY.  
Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.

## 15. REGULATORY INFORMATION

**NFPA & HMIS Hazard Ratings:**

**NFPA**

2 Health  
1 Flammability  
0 Reactivity

**HMIS**

2 Health  
1 Flammability  
0 Reactivity  
C PPE

**SARA Hazard Notification/Reporting SARA Title III Hazard Category:**

Immediate: Y                      Fire: N  
Delayed: N                         Reactive: N  
Sudden Release of Pressure: N  
None

**Reportable Quantity (RQ) under U.S. CERCLA:**

**SARA, Title III, Section 313:**

Contains no chemical subject to SARA 313

**SARA, Title III, Section 302:**

EHS  
TPQ

None  
10,000 lbs  
Not listed  
Not listed

**RCRA Waste Code:**

**CA Proposition 65:**

## 16. OTHER INFORMATION

**SDS STATUS:** Updated  
**REASON FOR CHANGE:** Updated Technical Information  
**PREPARED BY:** Tandy O. Dunn, Director of Health, Safety & Environmental Affairs

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*NutriSol 8% Manganese*

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