



Safety Data Sheet

Report Date 26-Aug-16

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1. Identification

Product Name : TRACITE LF MANGANESE STARTER CHELATE
Synonyms : None
Product Use : Chelated Micronutrient - Manganese
Manufacturer/Supplier : Helena Chemical Company
Address : 225 Schilling Blvd. Collierville, TN 38017
General Information : 901-761-0050
Transportation Emergency Number : CHEMTREC:800-424-9300

2. Hazard Identification



Signal Word : Warning
Skin Irritation : Prolonged or repeated exposure may cause skin irritation.
Eye Irritation : May cause moderate to severe eye irritation.
Acute Toxicity Oral : No LD50. Ingestion may cause abdominal cramps and vomiting.
Acute Toxicity Dermal : No LD50 available.
Hazard Categories : Oral/Dermal/Inhalation Toxicity-5/5/5; Eye/Skin Irritation-2A/2; STOT-Repeated-2 (CNS)
Hazard Statement : May be harmful if swallowed
May be harmful in contact with skin
Causes serious eye irritation
Causes skin irritation
May be harmful if inhaled
May cause damage to organs (central nervous system) through prolonged or repeated exposure

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Blend of plant nutrients derived from manganese sulfate. The chelating agent is citric acid (CAS No. 77-92-9). GUARANTEED ANALYSIS:	Proprietary	100.00
Sulfur (S): 3% Combined Sulfur (S)		3%



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Manganese (Mn): 5%
5% Chelated Manganese (Mn)

4. First Aid Measures

Eye : Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.

Skin : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation : Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Ingestion : Call a poison control center or doctor immediately for treatment advice. Rinse mouth with water. Do not induce vomiting. Do not give anything by mouth if unconscious.

Indication of Immediate Medical Attention and Special Treatment Needed : In the event of an adverse response, treatment should be directed toward control of the symptoms.

5. Fire Fighting Measures

Extinguishing Media : Non-combustible liquid. Use extinguishing media suitable for underlying cause of fire.

Specific Hazards Arising from the Chemical : Product may produce toxic fumes under fire conditions.

Special Fire Fight Proc : Wear self-contained breathing apparatus and full protective clothing. Use water spray to keep fire-exposed containers cool.

6. Accidental Release Measures

Personal Precautions : Keep unprotected and unnecessary personnel out of spill area.

Protective Equipment : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.

Emergency Procedures : Dike spilled product to prevent spreading. Do not contaminate water supplies, lakes, streams, ponds or drains with spilled material.

Methods and Materials for Containment and Cleanup : If uncontaminated, collect and reuse product. If contaminated, absorb with an inert material such as clay, sand or sawdust, then collect and place in suitable containers for proper disposal.

7. Handling and Storage

Precautions for Safe Handling : Keep locked up and out of reach of children. Do not contaminate water, food or feed by storage, handling or disposal. Keep container tightly closed. Do not allow water to be introduced into the contents of the container.



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Conditions for Safe Storage : Store in original container only. May be corrosive to aluminum, mild steel and brass. Store in HDPE, fiberglass or stainless steel. Use only stainless steel, PVC or polypropylene fittings.

8. Exposure Controls / Personal Protection

TLV/PEL : Manganese dust and compounds (as Mn), TLV = 0.2 mg/m³ and PEL = 5 mg/m³.

Appropriate Engineering Controls : Local exhaust sufficient.

Personal Protective Equipment : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.

9. Physical and Chemical Properties

Odor/Appearance : Clear, reddish-brown liquid with ammonia odor.

Flash Point, °F : Non-combustible

Boiling Point, °F : >100 Degrees C.

Melting Point(Freezing point), °C : <30 Degrees F.

Vapor Pressure, mm Hg @ 20 °C : Not established

Vapor Density : Not established

Solubility in Water : Soluble

Molecular Formula : Not applicable, formulated mixture.

Density, g/mL @ 25 °C : 1.190-1.280

Evaporation Rate(Butyl Acetate = 1) : Not established

Octanol/Water Partition Coefficient : No information found

pH : 9.5-10.7

Flammable Limits (approximate volume % in air) : Not determined

Auto-ignition Temperature : Not determined

Decomposition temperature : No information found

10. Stability and Reactivity

Reactivity : No information found

Chemical Stability : Stable

Hazardous Decomposition Products : May emit sulfur dioxide under fire conditions.

Hazardous Polymerization : Will not occur

Conditions to Avoid : None currently known

Incompatible Materials : Product may react vigorously with acidic materials.



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11. Toxicological Information

- Acute Toxicity (Oral LD50)** : No LD50 available. Ingestion may cause vomiting/abdominal cramps. May be harmful if swallowed.
- Acute Toxicity (Dermal LD50)** : No LD50 available. May be harmful in contact with skin.
- Acute Toxicity Inhalation LC50** : No LC50 available. Inhalation may cause nose and throat irritation. May be harmful if inhaled.
- Likely Routes of Exposure** : Skin, eyes, inhalation (effects central nervous system)
- Skin Irritation** : Causes skin irritation.
- Eye Irritation** : Causes serious eye irritation.
- Skin Sensitization** : Not listed as a sensitizer.
- Carcinogenic** : None currently known.
- Chronic Effects** : None currently known.
- Other Hazards** : Manganese compounds may cause damage to central nervous system through prolonged or repeated exposure (inhalation).

12. Ecological Information

- Ecotoxicity** : No information found
- Persistence and Degradability** : No information found
- Bioaccumulative Potential** : No information found
- Mobility in Soil** : No information found
- Other Adverse Effects** : No information found

13. Disposal Considerations

- Waste Disposal Method** : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

14. Transport Information

- UN Proper Shipping Name** : Not regulated by DOT.
- Transport Hazard Class** : None
- UN Identification Number** : None
- Packaging Group** : None
- Environmental Hazards** : No information found
- Transport in Bulk** : No information found
- Special Precautions for Transportation** : May be regulated if shipped by air (IATA) or water (IMDG).



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Freight Classification : Fertilizing Compound, (Manufactured Fertilizer), Liquid, NOIBN (NMFC Item 68140, Sub 6, Class 70)

15. Regulatory Information

National Fire Protection Association Rating :

Health: 2 Fire: 1 Reactivity: 0
Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

S.A.R.A Title III Hazard Classification (Yes/No) :

Immediate(Acute) Health: Y
Delayed (Chronic) Health: Y
Sudden Release of N Pressure:
Fire: N
Reactive: N

16. Other Information

Data of Preparation/Revision : 26-August-2016