



Safety Data Sheet

Report Date 30-Jan-15

Page 1 of 4

1. Identification

Product Name : Ele-Max Manganese FL 3-0-0
Synonyms : None
Product Use : Foliar Nutritional Liquid Flowable
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 : None required
Skin Irritation : No known significant adverse effects or critical hazards.
Eye Irritation : No known significant adverse effects or critical hazards.
Acute Toxicity Oral : No known significant adverse effects or critical hazards.
Acute Toxicity Dermal : No known significant adverse effects or critical hazards.

Hazard Categories : Not classified as hazardous.

Hazard Statement : Not Hazardous

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Proprietary blend of plant nutrients derived from Urea and Manganese Carbonate.		100.00
Guaranteed Analysis:		
Total Nitrogen (N): 3.00%		
Manganese (Mn): 27.40%		
Chlorine (Cl), Maximum: 0.02%		

4. First Aid Measures

Eye : Rinse eyes with plenty of running water. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Skin : Wash with soap and water. Get medical attention if irritation develops.

Inhalation : Avoid inhalation of vapor, spray or mist. If inhaled, remove to fresh air. Get medical attention if you feel unwell.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Get medical attention if adverse health effects persist or are severe.

Indication of Immediate Medical Attention and Special Treatment Needed : Treat symptomatically. Contact poison control center or doctor immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. Observe for 48 hours.

5. Fire Fighting Measures

Extinguishing Media : Use an extinguishing agent suitable for the surrounding fire.

Specific Hazards Arising from the Chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Special Fire Fight Proc : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Wear self-contained breathing apparatus and full protective clothing.



Safety Data Sheet

Report Date 30-Jan-15

Page 2 of 4

6. Accidental Release Measures

- Personal Precautions** : Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material.
- Protective Equipment** : Eyewash station, emergency shower, splashproof goggles, chemical-resistant gloves, impervious apron and footwear. Use NIOSH-approved respirator if needed.
- Emergency Procedures** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods and Materials for Containment and Cleanup** : Stop leak if without risk. Move containers from spill area. Absorb with an inert dry material and place in appropriate waste containers for proper disposal.

7. Handling and Storage

- Precautions for Safe Handling** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.
- Conditions for Safe Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials, food and drink. Keep container tightly closed and sealed until ready for use.

8. Exposure Controls / Personal Protection

- TLV/PEL** : Not available for this mixture.
- Appropriate Engineering Controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Personal Protective Equipment** : Eyewash station, emergency shower, splashproof goggles, chemical-resistant gloves, impervious apron and footwear. Use NIOSH-approved respirator if needed.

9. Physical and Chemical Properties

- Odor/Appearance** : Pink liquid with undetermined odor.
- Flash Point, °F** : Not flammable
- Boiling Point, °F** : Not determined
- Melting Point(Freezing point), °C** : -5 Degrees C.
- Vapor Pressure, mm Hg @ 20 °C** : Not determined
- Vapor Density** : Not determined
- Solubility in Water** : Not determined
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 1.827
- Evaporation Rate(Butyl Acetate = 1)** : Not determined
- Octanol/Water Partition Coefficient** : Not determined
- pH** : 9
- Flammable Limits (approximate volume % in air)** : Not determined
- Auto-ignition Temperature** : Not applicable
- Decomposition temperature** : Not determined



Safety Data Sheet

Report Date 30-Jan-15

Page 3 of 4

10. Stability and Reactivity

- Reactivity** : No specific test data related to reactivity.
- Chemical Stability** : Stable
- Hazardous Decomposition Products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Hazardous Polymerization** : Will not occur
- Conditions to Avoid** : Avoid contamination by any source including metals, dust and organic materials.
- Incompatible Materials** : Urea reacts with calcium hypochlorite or sodium hypochlorite to form the explosive nitrogen trichloride.

11. Toxicological Information

- Acute Toxicity (Oral LD50)** : No known significant effects or critical hazards.
- Acute Toxicity (Dermal LD50)** : No known significant effects or critical hazards.
- Acute Toxicity Inhalation LC50** : No known significant effects or critical hazards.
- Likely Routes of Exposure** : Inhalation
- Skin Irritation** : No known significant effects or critical hazards.
- Eye Irritation** : No known significant effects or critical hazards.
- Skin Sensitization** : No known significant effects or critical hazards.
- Carcinogenic** : No known significant effects or critical hazards.
- Chronic Effects** : No known significant effects or critical hazards.
- Other Hazards** : No known significant effects or critical hazards.

12. Ecological Information

- Ecotoxicity** : No known significant effects or critical hazards.
- Persistence and Degradability** : No known significant effects or critical hazards.
- Bioaccumulative Potential** : No known significant effects or critical hazards.
- Mobility in Soil** : Not available
- Other Adverse Effects** : No known significant effects or critical hazards.

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, IATA or IMDG.
- Transport Hazard Class** : None
- UN Identification Number** : None
- Packaging Group** : None
- Environmental Hazards** : None noted
- Transport in Bulk** : No special requirements
- Special Precautions for Transportation** : None noted
- Freight Classification** : Fertilizing Compound, (Manufactured Fertilizer), Liquid, NOIBN (NMFC Item 68140, Sub 6, Class 70)



Safety Data Sheet

Report Date 30-Jan-15

Page 4 of 4

15. Regulatory Information

National Fire Protection Association Rating :

Health: 1 Fire: 0 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: N
Delayed (Chronic) Health: N
Sudden Release of Pressure: N
Fire: N
Reactive: N

16. Other Information

Data of Preparation/Revision : 23-January-2015