



# Safety Data Sheet

Report Date 12-Feb-15

Page 1 of 5

## 1. Identification

**Product Name** : ELE-MAX SULFUR COMPLETE SP  
**Synonyms** : None  
**Product Use** : Foliar Nutritional Soluble Powder  
**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** : Danger  
**Skin Irritation** : Mild irritant (rabbit)  
**Eye Irritation** : Severe irritant (rabbit)  
**Acute Toxicity Oral** : LD50 (rat) >2,150 mg/kg  
**Acute Toxicity Dermal** : LD50 (rabbit) >2,000 mg/kg  
**Hazard Categories** : Eye irritation - 1; Skin irritation - 3; Inhalation toxicity - 4; Oral/Dermal Toxicity - 5/5  
**Hazard Statement** : Causes serious eye damage  
May damage fertility or the unborn child  
May cause damage to organs through prolonged or repeated exposure  
Harmful to aquatic life with long lasting effects

## 3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Blend of plant nutrients derived from Magnesium Sulfate, Manganese Sulfate, Sodium Borate and Sodium Molybdate. Guaranteed Analysis: Magnesium (Mg): 8.0% Sulfur (S): 14.5% Boron (B): 5.0% Manganese (Mn): 7.0%	Proprietary blend	100.00



## Safety Data Sheet

Report Date 12-Feb-15

Page 2 of 5

Molybdenum (Mo): 0.4%  
Chlorine (Cl), maximum: 1.00%

### 4. First Aid Measures

- Eye** : Immediately flush eyes with plenty of water for at least 15 minutes, keeping eyelids open. Check for and remove any contact lenses. Get medical attention immediately.
- Skin** : Wash with soap and water. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : If inhaled, remove to fresh air. Get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate air-purifying respirator or self-contained breathing apparatus.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention.
- Indication of Immediate Medical Attention and Special Treatment Needed** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

### 5. Fire Fighting Measures

- Extinguishing Media** : Use extinguishing media suitable for underlying cause of fire.
- Specific Hazards Arising from the Chemical** : No specific fire or explosion hazard. Decomposition products may include carbon dioxide, carbon monoxide and metal oxide/oxides.
- Special Fire Fight Proc** : Wear self-contained breathing apparatus and full protective clothing. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

### 6. Accidental Release Measures

- Personal Precautions** : Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- Protective Equipment** : Chemical-resistant impervious gloves, tightly fitting goggles, appropriate footwear and personal protective equipment for the body. Use air-purifying respirator if a risk assessment indicates it is necessary. Safety shower and eyewash should be available nearby.
- Emergency Procedures** :
- Methods and Materials for Containment and Cleanup** : Do not create dust. Do not discharge spilled product into drains or rivers. Collect spilled product and place in suitable container for proper disposal.

### 7. Handling and Storage



## Safety Data Sheet

Report Date 12-Feb-15

Page 3 of 5

- 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. Avoid exposure, especially during pregnancy. Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material. Do not reuse container.
- 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 and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use.

### 8. Exposure Controls / Personal Protection

- TLV/PEL** : Sulfuric acid, manganese: PEL Ceiling 5 mg/m<sup>3</sup> (calculated as Mn)
- Appropriate Engineering Controls** : Local exhaust ventilation should be sufficient.
- Personal Protective Equipment** : Chemical-resistant impervious gloves, tightly fitting goggles, appropriate footwear and personal protective equipment for the body. Use air-purifying respirator if a risk assessment indicates it is necessary. Safety shower and eyewash should

### 9. Physical and Chemical Properties

- Odor/Appearance** : White odorless powder.
- Flash Point, °F** : Not determined
- Boiling Point, °F** : Not determined
- Melting Point(Freezing point), °C** : Not determined
- Vapor Pressure, mm Hg @ 20 °C** : Not determined
- Vapor Density** : Not determined
- Solubility in Water** : Soluble in cold water
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : Not determined
- Evaporation Rate(Butyl Acetate = 1)** : Not applicable
- Octanol/Water Partition Coefficient** : Not determined
- pH** : Not determined
- Flammable Limits (approximate volume % in air)** : Not determined
- Auto-ignition Temperature** : Not determined
- Decomposition temperature** : Not determined

### 10. Stability and Reactivity

- Reactivity** : No test data related to reactivity.



## Safety Data Sheet

Report Date 12-Feb-15

Page 4 of 5

- 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** : No specific data

### 11. Toxicological Information

- Acute Toxicity (Oral LD50)** : >2,150 mg/kg (rat)
- Acute Toxicity (Dermal LD50)** : >2,000 mg/kg (rabbit)
- Acute Toxicity Inhalation LC50** : 2 mg/L (rat)
- Likely Routes of Exposure** : Eyes
- Skin Irritation** : No known significant effects or critical hazards.
- Eye Irritation** : Causes serious eye damage
- Skin Sensitization** : No known significant effects or critical hazards.
- Carcinogenic** : Not listed by IARC, NTP or OSHA.
- Chronic Effects** : No known significant effects or critical hazards.
- Other Hazards** : Reproductive toxicity - May damage fertilizer or the unborn child. Teratogen - May damage the unborn child.

### 12. Ecological Information

- Ecotoxicity** : Harmful to aquatic life with long lasting effects.
- 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



# Safety Data Sheet

Report Date 12-Feb-15

Page 5 of 5

**Packaging Group** : None  
**Environmental Hazards** : No hazards known  
**Transport in Bulk** : No information found  
**Special Precautions for Transportation** : No information found  
**Freight Classification** : Fertilizing Compound, (Manufactured Fertilizer), Solid, NOIBN (NMFC Item 68140, Sub 5, Class 50)

## 15. Regulatory Information

**National Fire Protection Association Rating** :

Health: 2      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: Y  
Delayed (Chronic) Health: Y  
Sudden Release of N Pressure:  
Fire: N  
Reactive: N

## 16. Other Information

**Data of Preparation/Revision** : 12-February-2015