Safety Data Sheet

1. Identification

Product Name : ELE-MAX SUPER ZINC FL 1-0-0
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 : No Signal Word
Skin Irritation : Slightly irritating to the skin.
Eye Irritation : Moderately irritating to eyes.
Acute Toxicity Oral : No known significant effects or critical hazards.
Acute Toxicity Dermal : No known significant effects or critical hazards.

Hazard Categories : Aquatic Toxicity (Acute) -1; Aquatic Toxicity (Chronic) - 1

Hazard Statement : Very toxic to aquatic life
Very toxic to aquatic life with long lasting effects

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Blend of plant nutrients derived from Urea and Zinc Oxide. Guaranteed Analysis: Total Nitrogen (N): 1.00% Zinc (Zn): 40.00% Chlorine (Cl), maximum: 1.00%		100.00

4. First Aid Measures

Eye : Rinse eye 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.
Indication of Immediate Medical Attention and Special Treatment Needed : Treat symptomatically. Contact poison control center 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. This material is very toxic to aquatic life with long lasting effects. Fire water must be and prevented from being discharged to any waterway, sewer or drain.
Special Fire Fight Proc	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Wear appropriate protective equipment and self-contained breating apparatus.

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, chemical-resistant gloves, impervious apron and footwear. Use air-purifying respirator when needed.
Emergency Procedures	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. May be harmful to environment if released in large quantities. Collect spillage.
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 an appropriate waste disposal container.

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. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

8. Exposure Controls / Personal Protection

TLV/PEL	: Not established for mixture
Appropriate Engineering Controls	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Personal Protective Equipment	: Eyewash station, emergency shower, chemical-resistant gloves, impervious apron and footwear. Use air-purifying respirator when needed.

9. Physical and Chemical Properties

Odor/Appearance	: White liquid; undetermined odor.
Flash Point, ^{0}F	: Not flammable
Boiling Point, ^{0}F	: Not determined
Melting Point(Freezing point), ^{0}C	: -7 Degrees C.
Vapor Pressure, mm Hg @ 20 ^{0}C	: Not determined
Vapor Density	: Not determined
Solubility in Water	: Not determined
Molecular Formula	: Not applicable, formulated mixture.
Density, g/mL @ 25 ^{0}C	: 1.734
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 determined
Decomposition temperature	: Not determined

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	: Not available
Skin Irritation	: Slightly irritating to the skin.
Eye Irritation	: Moderately irritating to eyes.
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	: Very toxic 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. Regulated by IATA and IMDG as UN3082, Environmentally Hazardous Substance, Liquid, n.o.s. (Zinc Oxide), 9, PG III, Marine Pollutant
Transport Hazard Class	: Class 9 (IATA/IMDG)
UN Identification Number	: UN3082 (IATA/IMDG)
Packaging Group	: PG III (IATA/IMDG)

Environmental Hazards : Marine Pollutant (IATA/IMDG only)
Transport in Bulk : Not regulated by DOT
Special Precautions for Transportation : None needed
Freight Classification : Fertilizing Compound, (Manufactured Fertilizer), Liquid, NOIBN (NMFC Item 68140, Sub 6, Class 70)

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

16. Other Information

Data of Preparation/Revision : 23-January-2015