Safety Data Sheet

Report Date **27-Mar-15**

1. Identification

Product Name : ELE-MAX FOLIAR PHOSPHITE 0-28-26
Synonyms : None
Product Use : Inorganic plant nutrients
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 (no pictogram required)
Skin Irritation : Slightly irritating to the skin
Eye Irritation : Mildly irritating to the eye
Acute Toxicity Oral : LD50 > 5,000 mg/kg (rats)
Acute Toxicity Dermal : LD50 > 5,000 mg/kg (rats)

Hazard Categories : Oral/Dermal/Inhalation Toxicity - 5/5/5; Eye Irritation - 2B; Skin Irritation - 3

Hazard Statement : Causes eye irritation
May be harmful if swallowed
May be harmful in contact with skin
May be harmful if inhaled
Causes mild skin irritation

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Blend of plant nutrients derived from potassium hydroxide (CAS No. 1310-58-3) and phosphorous acid (CAS No. 13598-36-2)	Proprietary	100.00
GUARANTEED ANALYSIS:		
Total Phosphoric Acid (P2O5):		28.00
Soluble Potash (K2O):		26.00

4. First Aid Measures

Eye : Flush eyes with water for 15 minutes, holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing the eye. Obtain immediate medical attention.
Skin : Remove contaminated clothing and wash skin thoroughly with soap and water. Obtain medical attention if irritation develops. Launder clothing before reuse.
Inhalation : Remove person to fresh air. Obtain medical attention if irritation develops.
Ingestion : Call a poison control center or doctor immediately. Rinse mouth with water. Do not induce vomiting. Do not give anything by mouth to an unconscious person.
Indication of Immediate Medical Attention and Special Treatment Needed : Treat symptomatically. Ingestion may result in irritation of the digestive tract.

5. Fire Fighting Measures

Extinguishing Media : Use extinguishing media for underlying cause of fire.

Specific Hazards Arising from the Chemical : On burning, may release toxic and corrosive gases/vapors (phosphorus oxides, potassium oxides).

Special Fire Fight Proc : Wear self-contained breathing apparatus and full protective equipment. 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 : Impervious gloves, splashproof goggles or face shield, impervious apron and footwear. Eyewash station should be available in work area. Use NIOSH-approved, mist-type canister respirator if mist is present.

Emergency Procedures : Do not contaminate water supplies with spilled material. Dike spill to prevent spreading. Spills may be reported to local, state and Federal authorities.

Methods and Materials for Containment and Cleanup : Contain spill and reuse material, if uncontaminated. If contaminated, absorb material with an absorbent, such as clay or sand, and place in plastic containers for proper disposal.

7. Handling and Storage

Precautions for Safe Handling : Keep container tightly closed. Do not contaminate water supplies, lakes, streams, ponds, drains or sewers by cleaning of equipment, disposal of rinse water, or spillage of product.

Conditions for Safe Storage : Keep out of reach of children. May be stored in unheated areas but keep from freezing. Store at temperatures above 45 Degrees F. at all times. Avoid high temperatures.

8. Exposure Controls / Personal Protection

TLV/PEL : Not determined for mixture.

Appropriate Engineering Controls : Local exhaust normally sufficient.

Personal Protective Equipment : Impervious gloves, splashproof goggles or face shield, impervious apron and footwear. Eyewash station should be available in work area. Use NIOSH-approved, mist-type canister respirator if mist is present.

9. Physical and Chemical Properties

Odor/Appearance : Clear colorless to amber liquid/characteristic

Flash Point, ^{0}F : Not flammable

Boiling Point, ^{0}F : +/- 105 Degrees C.

Melting Point(Freezing point), ^{0}C : < 5 Degrees C.

Vapor Pressure, mm Hg @ 20 ^{0}C : 23 hPa (as water)

Vapor Density : No data available

Solubility in Water : Soluble

Molecular Formula : Not applicable, formulated mixture.

Density, g/mL @ 25 ^{0}C : 1.440-1.520

Evaporation Rate(Butyl Acetate = 1) : No information found

Octanol/Water Partition Coefficient : No information found

pH : 5.8-8.0

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

Auto-ignition Temperature : Not applicable

Decomposition temperature : 180 Degrees C.

10. Stability and Reactivity

Reactivity : See Hazardous Decomposition Products.
Chemical Stability : Stable
Hazardous Decomposition Products : Toxic, corrosive gases/vapors, such as phosphine and phosphorus oxides, may be released if burned. Reaction is accelerated if exposed to (some) acids.
Hazardous Polymerization : Will not occur
Conditions to Avoid : Avoid temperatures below -10 Degrees C. Avoid high temperatures. Keep away from oxidizing agents and strong acids. Keep away from metals and metal powders.
Incompatible Materials : Keep away from iron, metal and lead.

11. Toxicological Information

Acute Toxicity (Oral LD50) : >5,000 mg/kg (rat)
Acute Toxicity (Dermal LD50) : >5,000 mg/kg (rat)
Acute Toxicity Inhalation LC50 : >2.10 mg/L (rat) (Vapor Limit)
Likely Routes of Exposure : Skin and eyes (contact)
Skin Irritation : Slightly irritating to the skin.
Eye Irritation : Mildly irritating to the eye.
Skin Sensitization : Not a contact sensitizer.
Carcinogenic : None currently known.
Chronic Effects : None currently known, where the product is used under conditions of good industrial hygiene.
Other Hazards : None currently known.

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, IATA or IMDG.
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 : No information found

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: 0 Reactivity: 1

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 : 27-March-2015