



Safety Data Sheet

Report Date 25-Apr-15

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1. Identification

Product Name : ECO-MATE ZINC 10%
Synonyms : None
Product Use : Complexed Micronutrient - Zinc
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 : Causes mild skin irritation
Eye Irritation : Causes eye irritation
Acute Toxicity Oral : Harmful if swallowed.
Acute Toxicity Dermal : May be harmful in contact with skin.

Hazard Categories : Oral/Dermal/Inhalation Toxicity - 4/5/5; Skin Irritation - 3; Eye Irritation 2B

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

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Zinc sulfate	7733-02-0	>28.00
Water and lignin sulfonate, a complexing agent.		<72.00
GUARANTEED ANALYSIS:		
Sulfur (S):		4.50%
Zinc (Zn):		10.00%

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 water. Do not induce vomiting. Do not give anything by mouth if unconscious.

Indication of Immediate Medical Attention and Special Treatment Needed : Treat symptomatically. If product is being mixed with pesticides and/or spray adjuvants, follow all precautionary statements on the accompanying product(s) labeling.



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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** : Contain spilled product to prevent spreading to soil, waterways or drains.
- Methods and Materials for Containment and Cleanup** : Collect and reuse, if uncontaminated. If contaminated, absorb material with inert absorbent such as clay or sand. Collect and place in suitable container for proper disposal.

7. Handling and Storage

- Precautions for Safe Handling** : Keep out of reach of children. Keep container tightly closed. Do not allow water to be introduced to the contents of this container. Do not contaminate water sources by cleaning or equipment or disposal of spray waste.
- Conditions for Safe Storage** : Store in original container only.

8. Exposure Controls / Personal Protection

- TLV/PEL** : Not established for this mixture.
- 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** : Opaque brown liquid without solids.
- Flash Point, °F** : Non-combustible
- Boiling Point, °F** : >100 Degrees C.
- Melting Point(Freezing point), °C** : <20 Degrees C.
- Vapor Pressure, mm Hg @ 20 °C** : Not established
- Vapor Density** : Not established
- Solubility in Water** : 99%
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 1.314 to 1.334
- Evaporation Rate(Butyl Acetate = 1)** : Not established
- Octanol/Water Partition Coefficient** : No information found
- pH** : 2.5 to 4.5
- Flammable Limits (approximate volume % in air)** : Not applicable



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Auto-ignition Temperature : Not applicable
Decomposition temperature : No information found

10. Stability and Reactivity

Reactivity : No reactivity rating
Chemical Stability : Stable
Hazardous Decomposition Products : Sulfur dioxide, carbon dioxide and carbon monoxide under fire conditions.
Hazardous Polymerization : Will not occur
Conditions to Avoid : None currently known
Incompatible Materials : Product may react vigorously with alkaline materials.

11. Toxicological Information

Acute Toxicity (Oral LD50) : No LD50 available. Ingestion results in vomiting and abdominal cramps.
Acute Toxicity (Dermal LD50) : No LD50 available. May be harmful in contact with skin.
Acute Toxicity Inhalation LC50 : No LC50 available. May be harmful if inhaled.
Likely Routes of Exposure : Ingestion, eyes, skin.
Skin Irritation : Causes mild skin irritation.
Eye Irritation : Causes eye irritation.
Skin Sensitization : No information found.
Carcinogenic : None currently known.
Chronic Effects : None currently known.
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 in single containers <321.5 gallons.
Transport Hazard Class : None
UN Identification Number : None
Packaging Group : None
Environmental Hazards : No information found
Transport in Bulk : If shipped in single package >= 321.5 gallons, ship as: RQ, UN3082, Environmentally Hazardous Substance, Liquid, n.o.s., (Zinc Sulfate), 9, PG III "ERG # 171"
Special Precautions for Transportation : No information found



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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: 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 : 25-April-2015