



Safety Data Sheet

Report Date 18-Apr-15

Page 1 of 4

1. Identification

Product Name : KICKSTAND MICRO MIX
Synonyms : None
Product Use : Chelated Micronutrients
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 : Brief contact is essentially nonirritating. May cause more severe response if skin is abraded.
Eye Irritation : May cause pain disproportionate to the level of irritation to eye tissues. May cause slight corneal injury.
Acute Toxicity Oral : LD50 >3,980 mg/kg (ammonium EDTA)
Acute Toxicity Dermal : No information found.
Hazard Categories : Oral/Dermal/Inhalation Toxicity - 5/5/5; Eye Irritation - 2A; Skin Irritation - 3
Hazard Statement : May be harmful if swallowed
May be harmful in contact with skin
Causes serious eye irritation
Causes mild skin irritation
May be harmful if inhaled

3. Composition / Information on Ingredients

| Component | CAS Number | Weight % |
|---|-------------|----------|
| Proprietary blend of plant nutrients derived from copper EDTA, manganese EDTA, sodium molybdate, and zinc EDTA. | Proprietary | 100.00 |
| GUARANTEED ANALYSIS: | | |
| Copper (Cu): 1.0% | | |
| Manganese (Mn): 1.0% | | |
| Molybdenum (Mo): 0.2% | | |
| Zinc (Zn): 3.0% | | |
| The chelating agent is EDTA (ethylenediaminetetraacetic acid). | | |

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 : Remove contaminated clothing. Wash affected area with plenty of soap and water. Get medical attention if irritation occurs. Launder clothing before reuse.
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.



Safety Data Sheet

Report Date 18-Apr-15

Page 2 of 4

Ingestion : Call a poison control center or doctor immediately for treatment advice. Rinse mouth with water. Do not induce vomiting. Do not give anything by mouth if unconscious.

Indication of Immediate Medical Attention and Special Treatment Needed : Treat symptomatically.

5. Fire Fighting Measures

Extinguishing Media : Use water fog or spray, dry chemical, foam or carbon dioxide extinguishing media.

Specific Hazards Arising from the Chemical : May emit toxic and irritating fumes under fire conditions.

Special Fire Fight Proc : Wear self-contained breathing apparatus and full protective clothing.

6. Accidental Release Measures

Personal Precautions : Keep unprotected and unnecessary personnel out of spill area.

Protective Equipment : Splashproof goggles or face shield, impervious (nitrile) 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. Do not allow to enter any waterways, sewers or drains.

Methods and Materials for Containment and Cleanup : If uncontaminated, collect and reuse as intended. If contaminated, absorb with an inert material, collect and place in suitable containers for proper disposal.

7. Handling and Storage

Precautions for Safe Handling : Keep locked up and out of reach of children. Do not contaminate water, food or feed by storage or disposal.

Conditions for Safe Storage : Store in original container only. Keep container tightly closed. Do not allow water to be introduced into the contents of this container. Do not store near heat or open flame. Do not store with oxidizing agents or ammonium nitrate.

8. Exposure Controls / Personal Protection

TLV/PEL : Not established for mixture.

Appropriate Engineering Controls : Ensure adequate ventilation.

Personal Protective Equipment : Splashproof goggles or face shield, impervious (nitrile) 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 : Clear, dark blue liquid; ammonia odor.

Flash Point, °F : Non-combustible

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 : Miscible

Molecular Formula : Not applicable, formulated mixture.

Density, g/mL @ 25 °C : 1.180-1.200



Safety Data Sheet

Report Date 18-Apr-15

Page 3 of 4

Evaporation Rate(Butyl Acetate = 1) : Not determined
Octanol/Water Partition Coefficient : No information found
pH : 9.0-10.0 (pure)
Flammable Limits (approximate volume % in air) : Not applicable
Auto-ignition Temperature : Not applicable
Decomposition temperature : Not determined

10. Stability and Reactivity

Reactivity : No information found
Chemical Stability : Stable
Hazardous Decomposition : May produce oxides of carbon and nitrogen under fire conditions.
Products
Hazardous Polymerization : Will not occur
Conditions to Avoid : None known
Incompatible Materials : Strong oxidizers, aluminum, zinc, copper alloys and nickel.

11. Toxicological Information

Acute Toxicity (Oral LD50) : >3,980 mg/kg (rat) for ammonium EDTA.
Acute Toxicity (Dermal LD50) : Not determined. May be harmful in contact with skin.
Acute Toxicity Inhalation LC50 : Not determined. May be harmful if inhaled.
Likely Routes of Exposure : Eyes, skin, inhalation, ingestion
Skin Irritation : Brief contact is essentially nonirritating. May cause more severe response if skin is abraded. Repeated contact may cause slight irritation with local redness.
Eye Irritation : May cause pain disproportionate to the level of irritation to eye tissues. May cause slight corneal injury. Vapor may cause irritation experienced as mild discomfort and redness.
Skin Sensitization : No information found.
Carcinogenic : Not listed by IARC, NTP or OSHA.
Chronic Effects : None currently known for this formulation.
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



Safety Data Sheet

Report Date **18-Apr-15**

Page 4 of 4

UN Proper Shipping Name : Not regulated by DOT, IATA or IMDG. See Transportation in Bulk.
Transport Hazard Class : None
UN Identification Number : None
Packaging Group : None
Environmental Hazards : US Reportable Quantity >691 gallons (ammonium hydroxide - 1,000 lbs)
Transport in Bulk : If shipped by ground in single packages >691 gallons, ship as: RQ, UN3082, Environmentally Hazardous Substance, Liquid, n.o.s., (Ammonium Hydroxide), 9, PG III "ERG # 171"
Special Precautions for Transportation : None
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: 1 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 : 18-April-2015