



Safety Data Sheet

Report Date 20-May-15

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1. Identification

Product Name : NutrAsyst CONCENTRATE (National)
Synonyms : None
Product Use : Fertilizer Additive
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 skin irritation.
Eye Irritation : Causes serious eye irritation.
Acute Toxicity Oral : May be harmful if swallowed.
Acute Toxicity Dermal : May be harmful in contact with skin.

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

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

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Fulvic Acid	Proprietary	20.00
Other ingredients	Proprietary	80.00

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

Indication of Immediate Medical Attention and Special Treatment Needed : In the event of an adverse response, treatment should be directed toward control of the symptoms.

5. Fire Fighting Measures



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- Extinguishing Media** : Use water fog, chemical foam, carbon dioxide or dry chemical extinguishing agents.
- Specific Hazards Arising from the Chemical** : Hazardous decomposition materials include oxides of carbon and unknown materials. Potassium hydroxide may react with metals to liberate flammable hydrogen gas.
- 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 gloves, impervious apron or coveralls, impervious footwear. Respiratory protection is not normally needed. Eyewash and emergency shower should be available in work area.
- Emergency Procedures** : Contain spilled product by diking. Do not contaminate water supplies, lakes, streams, ponds, sewers or drains.
- Methods and Materials for Containment and Cleanup** : If uncontaminated, collect and reuse as intended. If contaminated, absorb material with an inert absorbent, such as clay, sand or sawdust. 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. Keep container tightly closed. Do not allow water to be introduced into the contents of this container. Do not contaminate water, food or feed by storage, handling or disposal.
- Conditions for Safe Storage** : Store in original container only. Do not store near heat or open flame. Do not store with oxidizing agents or ammonium nitrate.

8. Exposure Controls / Personal Protection

- TLV/PEL** : Potassium Hydroxide - 2 mg/m3 STEL ACGIH TLV. Fulvic Acid Solution - no TLV/PEL established.
- Appropriate Engineering Controls** : Use with adequate general or local exhaust ventilation.
- Personal Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron or coveralls, impervious footwear. Respiratory protection is not normally needed. Eyewash and emergency shower should be available in work area.

9. Physical and Chemical Properties

- Odor/Appearance** : Orange to brownish liquid; no appreciable 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** : Dispersible
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 1.035-1.069
- Evaporation Rate(Butyl Acetate = 1)** : Not determined
- Octanol/Water Partition Coefficient** : No information found
- pH** : <11.0
- Flammable Limits (approximate volume % in air)** : Not determined



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Auto-ignition Temperature : Not determined
Decomposition temperature : Not determined

10. Stability and Reactivity

Reactivity : Not normally reactive
Chemical Stability : Stable
Hazardous Decomposition Products : Oxides of carbon and unknown materials.
Hazardous Polymerization : Will not occur
Conditions to Avoid : Avoid extreme heat or freezing temperatures. Store away from metals and in original containers.
Incompatible Materials : Metals and strong oxidizing agents. Potassium hydroxide may react with metals to liberate flammable hydrogen gas.

11. Toxicological Information

Acute Toxicity (Oral LD50) : No data available. May cause gastrointestinal irritation, abdominal pain, nausea, vomiting, diarrhea.
Acute Toxicity (Dermal LD50) : No data available.
Acute Toxicity Inhalation LC50 : No data available. May cause mucous membrane and respiratory irritation.
Likely Routes of Exposure : Skin, eyes, inhalation, ingestion
Skin Irritation : May cause irritation. Prolonged exposure may cause irritation, dermatitis, or defatting of skin tissues.
Eye Irritation : May cause severe irritation. May cause temporary corneal damage.
Skin Sensitization : Not known to cause sensitization.
Carcinogenic : Not listed by IARC, NTP or OSHA.
Chronic Effects : None currently known.
Other Hazards : None currently known.

12. Ecological Information

Ecotoxicity : Potassium Hydroxide: 96 hour LC50 Mosquito fish - 80 mg/L
Persistence and Degradability : No data available
Bioaccumulative Potential : No data available
Mobility in Soil : No data available
Other Adverse Effects : None known

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



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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: 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 : 20-May-2015