



Safety Data Sheet

Report Date 12-May-15

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1. Identification

Product Name : NutrAsyst (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. Prolonged exposure may cause irritation dermatitis, or defatting of tissues.
Eye Irritation : May cause moderate to severe eye irritation with pain and tearing.
Acute Toxicity Oral : Not hazardous by ingestion.
Acute Toxicity Dermal : Not hazardous by skin absorption.
Hazard Categories : Eye Irritation - 2A; Skin Irritation - 2; STOT, Single Exposure, Respiratory irritation - 3
Hazard Statement : Causes serious eye irritation
Causes skin irritation
May cause respiratory irritation

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Fulvic acid solution	Proprietary	5.00
Other ingredients	Proprietary	95.00

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** : Aqueous solution - non-combustible. Use extinguishing media suitable for underlying cause of fire.
- Specific Hazards Arising from the Chemical** : At extreme temperatures, carbon monoxide, an oxidation product, may be evolved.
- 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 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, drains or sewers.
- Methods and Materials for Containment and Cleanup** : If uncontaminated, collect and reuse as intended. If contaminated, absorb material with an inert material, such as clay, sand or sawdust. Collect and place in suitable containers for proper disposal.

7. Handling and Storage

- Precautions for Safe Handling** : Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Avoid breathing vapors. Keep containers closed when not in use. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Ensure all containers are labeled.
- Conditions for Safe Storage** : Store in a cool, well-ventilated area away from heat and incompatible materials.

8. Exposure Controls / Personal Protection

- TLV/PEL** : No TLV/PEL established for Fulvic Acid. TLV=1 mg/m³ and PEL=1 mg/m³ for Phosphoric Acid.
- Appropriate Engineering Controls** : Use with adequate general or local exhaust ventilation.
- 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** : Clear to slightly hazy liquid with amber tint.
- 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** : Soluble in water
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 0.993-1.023
- Evaporation Rate(Butyl Acetate = 1)** : Not determined
- Octanol/Water Partition Coefficient** : No information found
- pH** : 2.1 to 2.6
- Flammable Limits (approximate volume % in air)** : Not determined
- Auto-ignition Temperature** : Not determined



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Decomposition temperature : Not determined

10. Stability and Reactivity

- Reactivity** : Not normally reactive
- Chemical Stability** : Stable
- Hazardous Decomposition** : Oxides of carbon and phosphorus and unknown materials.
- Products**
- Hazardous Polymerization** : Will not occur
- Conditions to Avoid** : Avoid extreme heat or freezing temperatures. Store away from metals and in original container.
- Incompatible Materials** : Metals and strong oxidizing agents.

11. Toxicological Information

- Acute Toxicity (Oral LD50)** : No LD50 for mixture. Gastrointestinal irritation, abdominal pain, nausea, vomiting, diarrhea may oc.
- Acute Toxicity (Dermal LD50)** : No toxicity hazard by skin absorption.
- Acute Toxicity Inhalation LC50** : No LC50 available. May cause irritation of the upper respiratory tract.
- Likely Routes of Exposure** : Skin, eyes, inhalation
- Skin Irritation** : May cause irritation. Prolonged exposure may cause irritation, dermatitis, or defatting of skin tissues.
- Eye Irritation** : May cause moderate to severe irritation with pain and tearing.
- Skin Sensitization** : This material is 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** : 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



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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 : 12-May-2015