



Safety Data Sheet

Report Date 16-Feb-17

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1. Identification

Product Name : FERTILINK
Synonyms : None
Product Use : Liquid Humic Acid
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 : Eye/Skin Irritation-2A/2; Oral/Dermal/Inhalation Toxicity-5/5/5

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 %
Humic Acid Solution	Proprietary	<= 12
Potassium Hydroxide	1310-58-3	1
Inert ingredients	Proprietary	87

4. First Aid Measures

Eye : Immediately flush eyes with plenty of water for several minutes while holding the eyelids apart. Remove contact lenses, if present and easy to do. Get medical attention if irritation persists.

Skin : Remove contaminated clothing. Wash skin thoroughly with soap and water for several minutes. Get medical attention if irritation occurs and persists. Launder clothing before re-use.

Inhalation : Remove victim to fresh air. Get medical attention if symptoms occur and persist.

Ingestion : Do not induce vomiting. Rinse mouth with water and give one glass of water to drink. Get medical attention if symptoms develop.

Indication of Immediate Medical Attention and Special Treatment Needed : Immediate medical attention should not be required. Treat symptomatically.

5. Fire Fighting Measures

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



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- Specific Hazards Arising from the Chemical** : None known. 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 for all fires involving chemicals. Aqueous solutions may cause surfaces to be extremely slippery and cause a slip hazard.

6. Accidental Release Measures

- Personal Precautions** : Avoid contact with the eyes. Avoid prolonged skin contact.
- Protective Equipment** : Wear appropriate protective clothing.
- Emergency Procedures** : Aqueous solutions may cause surfaces to be extremely slippery and cause a slip hazard.
- Methods and Materials for Containment and Cleanup** : Contain and collect free liquid where possible. Neutralize small spills and residues and collect using an inert absorbent material and place in appropriate containers for disposal. Prevent spill from entering sewers and water courses. Report releases as required by local, state and federal authorities.

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 and leaks, etc.) readily available. Ensure all containers are labeled. Do not reuse containers. Empty containers retain product residues which can be hazardous.
- Conditions for Safe Storage** : Store in a cool, well-ventilated area away from heat and incompatible materials.

8. Exposure Controls / Personal Protection

- TLV/PEL** : 2 mg/m3 STEL ACGIH TLV (potassium hydroxide)
- Appropriate Engineering Controls** : Use with adequate general or local exhaust ventilation.
- Personal Protective Equipment** : Wear impervious gloves, chemical safety glasses with side shields or goggles, impervious coveralls, apron and boots. Suitable washing facilities should be available. Use NIOSH-approved respirator with dust/mist cartridges if needed.

9. Physical and Chemical Properties

- Odor/Appearance** : Dark brown liquid, amine-like odor.
- Flash Point, °F** : Not determined
- 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** : 1.025-1.050 (8.66 lbs/gal)
- Evaporation Rate(Butyl Acetate = 1)** : Not determined
- Octanol/Water Partition Coefficient** : Not determined
- pH** : 9.59 to 10.98
- Flammable Limits (approximate volume % in air)** : No information found
- Auto-ignition Temperature** : Not applicable



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Decomposition temperature : Not determined

10. Stability and Reactivity

- Reactivity** : Not normally reactive
- Chemical Stability** : Stable
- Hazardous Decomposition** : May emit oxides of carbon and unknown materials. Potassium hydroxide may react with metals to liberate flammable hydrogen gas.
- 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 data available for mixture. May be harmful if swallowed.
- Acute Toxicity (Dermal LD50)** : No LD50 data available for mixture. May be harmful in contact with skin.
- Acute Toxicity Inhalation LC50** : No LC50 data available. May be harmful if inhaled.
- Likely Routes of Exposure** : Skin and eyes
- Skin Irritation** : Causes skin irritation.
- Eye Irritation** : Causes serious eye irritation.
- Skin Sensitization** : Not a skin sensitizer
- Carcinogenic** : Not listed by IARC, NTP or OSHA.
- Chronic Effects** : No data available
- Other Hazards** : No data available

12. Ecological Information

- Ecotoxicity** : 96 hr LC50 (Mosquito fish) - 80 mg/L (potassium hydroxide); no data available for Humic Acid Solution
- 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** : None known
- Transport in Bulk** : No information available
- Special Precautions for Transportation** : None known



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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: 1 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 : 16-February-2017