



Safety Data Sheet

Report Date 24-Mar-15

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1. Identification

Product Name : NUCLEUS HYPERLINK HP 8-24-4
Synonyms : None
Product Use : Nutritional
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 (no symbol required)
Skin Irritation : May cause skin irritation with prolonged or repeated contact.
Eye Irritation : May cause eye irritation after direct contact with liquid.
Acute Toxicity Oral : No information found
Acute Toxicity Dermal : No hazard anticipated due to absorption.

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

Hazard Statement : May be harmful if swallowed
Causes eye irritation
Causes mild skin irritation
May be harmful if inhaled

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Blend of plant nutrients derived from urea, phosphoric acid, potassium hydroxide and ammonium polyphosphate. GUARANTEED ANALYSIS: Total Nitrogen (N): 8.00% Available Phosphate (P2O5): 24.00 Soluble Potash (K2O): 4.00%	Proprietary	100.00

4. First Aid Measures

Eye : Immediately flush eyes with water, continuing for at least 15 minutes. If irritation develops, get medical attention.

Skin : Remove contaminated clothing. Wash affected area with soap and water. Get medical attention if irritation develops or persists.

Inhalation : Move to fresh air. If irritation persists, seek medical attention.

Ingestion : Give a large amount of water to drink. Get medical attention. Do not induce vomiting unless instructed to do so by a doctor.

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

5. Fire Fighting Measures

Extinguishing Media : Non-combustible liquid. Use extinguishing media suitable for underlying cause of fire.

Specific Hazards Arising from the Chemical : May produce oxides of nitrogen, oxides of phosphorus and ammonia.



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Special Fire Fight Proc : Wear self-contained breathing apparatus and full protective clothing. Prevent runoff of firefighting water.

6. Accidental Release Measures

- Personal Precautions** : Keep unprotected and unnecessary personnel out of spill area.
- Protective Equipment** : Splashproof goggles or face shield, impervious apron and footwear. Eyewash station and emergency shower should be available in work area. No respiratory protection required.
- Emergency Procedures** : Contain spilled product by diking to prevent runoff to water supplies, lakes, streams or ponds.
- Methods and Materials for Containment and Cleanup** : If uncontaminated, collect and use as intended. If contaminated, collect and place in suitable containers for proper disposal.

7. Handling and Storage

- Precautions for Safe Handling** : Keep out of reach of children. Do not contaminate water supplies, lakes, streams, ponds or drains with this material. Keep packages tightly closed and do not allow water to be introduced into contents.
- Conditions for Safe Storage** : Do not store with food, feed or other material to be used or consumed by humans or animals. Do not store near heat or open flame. Store in original containers only. This product may freeze at temperatures below 32 Degrees F. Thawing occurs readily at temperatures above 32 Degrees F.

8. Exposure Controls / Personal Protection

- TLV/PEL** : No TLV or PEL established for this mixture.
- Appropriate Engineering Controls** : Good general ventilation should be sufficient.
- Personal Protective Equipment** : Splashproof goggles or face shield, impervious apron and footwear. Eyewash station and emergency shower should be available in work area. No respiratory protection required.

9. Physical and Chemical Properties

- Odor/Appearance** : Clear green liquid with slight ammonia odor.
- Flash Point, °F** : Not flammable
- Boiling Point, °F** : >200 Degrees F.
- Melting Point(Freezing point), °C** : <30 Degrees F.
- Vapor Pressure, mm Hg @ 20 °C** : Not determined
- Vapor Density** : Not determined
- Solubility in Water** : Soluble
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 1.290-1.350
- Evaporation Rate(Butyl Acetate = 1)** : Not determined
- Octanol/Water Partition Coefficient** : No information found
- pH** : 6.50-7.60
- Flammable Limits (approximate volume % in air)** : Not applicable
- Auto-ignition Temperature** : Not applicable
- Decomposition temperature** : No information found



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10. Stability and Reactivity

- Reactivity** : No information found
- Chemical Stability** : Stable
- Hazardous Decomposition** : May produce oxides of nitrogen, oxides of phosphorus and ammonia.
- Products**
- Hazardous Polymerization** : Will not occur
- Conditions to Avoid** : Avoid contact with acids and bases.
- Incompatible Materials** : Incompatible with certain metals and bases.

11. Toxicological Information

- Acute Toxicity (Oral LD50)** : No information found. May be harmful if swallowed.
- Acute Toxicity (Dermal LD50)** : No hazard anticipated due to skin absorption.
- Acute Toxicity Inhalation LC50** : May be irritating to the mucous membranes and respiratory tract if spray mists/vapors are inhaled.
- Likely Routes of Exposure** : Skin, eyes, inhalation, ingestion.
- Skin Irritation** : May cause skin irritation with prolonged or repeated contact.
- Eye Irritation** : May cause eye irritation after direct contact with liquid.
- Skin Sensitization** : No information found
- 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**
- Freight Classification** : Fertilizing Compound, (Manufactured Fertilizer), Liquid, NOIBN (NMFC Item 68140, Sub 6, Class 70)

15. Regulatory Information



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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 : 24-March-2015