



# Safety Data Sheet

Report Date 27-Feb-15

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## 1. Identification

**Product Name** : Nucleus O-PHOS NPK 0.1 Zn  
**Synonyms** : None  
**Product Use** : Ammonium Phosphate Solution  
**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** : Prolonged skin contact may cause irritation and possible rash.  
**Eye Irritation** : May cause irritation with contact. Prolonged exposure may cause severe irritation.  
**Acute Toxicity Oral** : No information found  
**Acute Toxicity Dermal** : No information found  
**Hazard Categories** : Eye irritation - 2B; Skin irritation - 3; Oral/Dermal/Inhalation Toxicity - 5/5/5  
**Hazard Statement** : Causes eye irritation  
Causes mild skin irritation  
Maybe harmful if swallowed, in contact with skin or if inhaled

## 3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Blend of plant nutrients derived from Diammonium Phosphate, Monoammonium Phosphate, Potassium Hydroxide, Ammonium Alkanoates, and Zinc EDTA.	Proprietary	100.00
GUARANTEED ANALYSIS:		
Total Nitrogen (N): 7.00%		
Available Phosphate (P <sub>2</sub> O <sub>5</sub> ): 21.00%		
Soluble Potash (K <sub>2</sub> O): 2.0%		
Zinc (Zn): 0.10%		

## 4. First Aid Measures

**Eye** : Flush eyes gently and thoroughly for at least 15 minutes with clean water, occasionally lifting the upper and lower eyelids. Seek medical attention.  
**Skin** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If redness or rash develops and persists, seek medical attention.  
**Inhalation** : Move to fresh air immediately. Seek medical attention if needed.  
**Ingestion** : Seek medical attention immediately. Drink 1 or 2 glasses of water to dilute, then induce vomiting. Do not give anything by mouth or induce vomiting if unconscious.  
**Indication of Immediate Medical Attention and Special Treatment Needed** : Treat symptomatically.

## 5. Fire Fighting Measures



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- Extinguishing Media** : This is not a flammable liquid. Use extinguishing media suitable for underlying cause of fire.
- Specific Hazards Arising from the Chemical** : Ammonia or other toxic fumes may be evolved under fire conditions.
- Special Fire Fight Proc** : Wear self-contained breathing apparatus and full protective clothing. Avoid exposure to smoke and fumes. Contain any runoff.

### 6. Accidental Release Measures

- Personal Precautions** : Avoid contact with skin and eyes. Keep unprotected and unnecessary personnel away from spill area.
- Protective Equipment** : Rubber or neoprene impervious gloves, splashproof goggles or faceshield, impervious apron and footwear. Eyewash and emergency shower should be available in work area.
- Emergency Procedures** : Dike spill area to prevent spread and runoff into lakes, ponds, drains, sewers and waterways.
- Methods and Materials for Containment and Cleanup** : Pump up spilled material and reuse, if uncontaminated. If contaminated, collect and place in suitable containers for disposal.

### 7. Handling and Storage

- Precautions for Safe Handling** : Keep out of reach of children. Do not store with food, feed or other material to be used or consumed by humans or animals. Do not contaminate water supplies, lakes, streams, ponds or drains.
- Conditions for Safe Storage** : Keep container tightly closed. May be stored in unheated area by protect from freezing.

### 8. Exposure Controls / Personal Protection

- TLV/PEL** : No information found
- Appropriate Engineering Controls** : General and/or local exhaust should be sufficient.
- Personal Protective Equipment** : Rubber or neoprene impervious gloves, splashproof goggles or faceshield, impervious apron and footwear. Eyewash and emergency shower should be available in work area.

### 9. Physical and Chemical Properties

- Odor/Appearance** : Clear very pale yellow liquid with ammonia odor.
- Flash Point, °F** : Not flammable
- Boiling Point, °F** : >212 Degrees F.
- Melting Point(Freezing point), °C** : <32 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** : 1.257-1.277
- Evaporation Rate(Butyl Acetate = 1)** : Not determined
- Octanol/Water Partition Coefficient** : No information found
- pH** : 6.1-7.3
- Flammable Limits (approximate volume % in air)** : Not applicable
- Auto-ignition Temperature** : Not applicable



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**Decomposition temperature** : No information found

### 10. Stability and Reactivity

- Reactivity** : No information found
- Chemical Stability** : Stable
- Hazardous Decomposition Products** : May release ammonia, phosphorous oxides and other toxic fumes under fire conditions.
- Hazardous Polymerization** : Will not occur
- Conditions to Avoid** : Avoid contact with strong oxidizing agents.
- Incompatible Materials** : Strong oxidizing agents.

### 11. Toxicological Information

- Acute Toxicity (Oral LD50)** : No information found
- Acute Toxicity (Dermal LD50)** : No information found
- Acute Toxicity Inhalation LC50** : No information found
- Likely Routes of Exposure** : Eyes, skin
- Skin Irritation** : Prolonged skin contact may cause irritation and possible rash.
- Eye Irritation** : May cause irritation to the eyes with contact. Prolonged exposure may cause severe irritation.
- Skin Sensitization** : Not listed as a skin sensitizer.
- Carcinogenic** : Not listed by IARC, NTP or OSHA.
- Chronic Effects** : No information found
- 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** : None
- Freight Classification** : Fertilizing Compound, (Manufactured Fertilizer), Liquid, NOIBN (NMFC Item 68140, Sub 6, Class 70)



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## 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 : 27-February-2015