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SDS#: 850

Revision Date: 05/30/15

Section 1 - Identification of the substance/mixture and of the supplier

Nutrol® **Trade Name: Product Code: NUTROL**

Chemical Name: Monopotassium phosphate

Application/Uses: Fungicide, Plant Nutrient, Tank Buffer

Restrictions: Do NOT mix with copper fungicides or any spray materials that warn against low pH (<5.5) applications

Distributor Information: PERFORMANCE NUTRITION - A Division of LidoChem, Inc. 20 Village Court, Hazlet, NJ 07730

Phone: (732) 888 8000 • Fax: (732) 264 2751 • email: info@lidochem.com

Emergency Phone Number: CHEMTREC - Day or Night - at 800 424 9300

Section 2 - Hazard Identification

Classification of the substance or mixture (GHS-US) **Precautionary Statements:** Precautionary Statements - Prevention, Response, Storage, Disposal Not classified No Label Element(s) required PREVENTION: Not Applicable **RESPONSE: Not Applicable Physical Hazards** None STORAGE: Not Applicable **Hazard Statements** P201: Obtain special instructions before use No Label Element(s) required P501: Dispose of contents/container to local, state and federal regulations.

GHS Label elements Hazard Pictograms Signal Word None **HNOC - Hazards Not Otherwise Classified**

None





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Section 3 - Composition/Information on Ingredients

Chemical Identity: KH₂ PO₄

| CAS#: | Common Name/Synonyms: | % by Wt. |
|-----------|-------------------------|----------|
| 7778-77-0 | Monopotassium Phosphate | 100% |
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| | | |

Section 4 - First Aid Measures

Description of first aid measures

General Advice:

Remove contaminated clothing and shoes. Seek medical advice immediately and show safety data sheet or product label to the doctor, if possible.

If Inhaled:

Remove person from contaminated area to fresh air. If not breathing, give artificial respiration. Seek medical attention if irritation or dizziness occurs.

In Case Of Skin Contact:

Remove contaminated clothing and wash before re-using. Flush skin with water and then wash with soap and water. Seek medical attention if irritation persists.

In Case Of Eye Contact:

Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical if irritation persists.

If Swallowed:

Seek medical attention or call a poison control center immediately. Do not induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in section 2. Further symptoms are possible.

Indication of any immediate medical attention and special treatment needed:

No additional information available.

Section 5 - Fire-fighting Measures

Extinguishing media:

Suitable extinguishing media: water spray, dry powder, carbon dioxide, foam.

Specific Hazards arising from the substance or mixture:

Oxides of phosphorus, potassium oxides.

Advice for firefighters:

Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face piece operated in positive pressure mode.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.





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Section 6 - Accidental release measures

Personal precautions, protective equipment and emergency procedures:

As outlined in section 8, wear appropriate respiratory protection. Avoid inhalation of dust, avoid generating dust. Use personal protective clothing. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions:

Do not allow spilled product to enter water supplies.

Methods and materials for containment and cleaning up:

Pick up and arrange disposal without creating dust. Sweep up and shovel. Avoid breathing dust.

Section 7- Handling and Storage

Precautions for safe handling:

Avoid direct or prolonged contact with skin and eyes. Keep containers closed when not being used. This product is hygroscopic and tends to cake on storage. Store in an area that is cool and dry. Recommended container material: stainless steel. Container material to avoid: brass.

Conditions for safe storage, including any incompatibilities:

Store product in original container away from children and domestic animals. Do not eat, drink or smoke when using this product. Wash hands and other exposed areas thoroughly after handling. Avoid formation of dust. Provide adequate ventilation. Protect packages against physical damage. Reseal containers immediately after use. Immediately remove and dispose of any spilled material.

Section 8 - Exposure Control / Personal Protection

Control parameters:

| Chamical Identity | CAS #: 7778-77-0 | ACGIH Thresho | ACGIH Threshold Limit Values | | OSHA PEL | | NIOSH REL | |
|-------------------------|------------------|---------------|------------------------------|-----|----------|------------|-----------|--|
| Chemical Identity: | | TWA NDA | STEL NDA | TWA | STEL | TWA NDA | STEL NDA | |
| Monopotassium Phosphate | | | | NDA | | | | |
| | | | | | | | | |
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Appropriate engineering controls:

Contains no substances with occupational exposure limit values. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

Individual protection measures, such as personal protective equipment:

Eye protection:

Tightly fitting safety goggles or face shield if a splashing hazard exists. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH.

Skin protection:

Handle with chemical resistant protective gloves. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Wash and dry hands.





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Section 8 - Exposure Control / Personal Protection (cont.)

Body protection:

Body protection must be chosen depending on activity and possible exposure, i.e. apron, chemical resistant footwear plus socks, long sleeved shirt, long pants, chemical protection suit.

Respiratory protection:

Respiratory protection is not typically required if airborne concentrations are maintained below the established exposure limits. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination. For emergency or non-routine, high exposure situations, use a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions. Observe OSHA regulations for respirator use (29 CFR 1910.134)

General safety and hygiene measures:

Eye wash fountains and safety showers must be easily accessible. Employees should wash their hands and face before eating, drinking or using tobacco products.

Section 9 - Physical and Chemical Properties

Appearance (physical state, color, etc): White crystalline

Odor: None

Odor threshold: No data available.

pH: 4.5 +/- 0.03 of a 1% solution

Melting point: 252.6 °C (486.7°F)

Freezing point: No data available.

Initial boiling point: >450°C (>842°F)

Boiling range: No data available.

Flash point: No data available.

Evaporation rate: No data available.

Flammability (solid, gas): No data available.

Upper/lower flammability or explosive limits: No data available.

Vapor pressure: No data available.

Vapor density: No data available.

Relative density: 2.338 g/cm³

Solubility: $208 \text{ g/l at } 20^{\circ}\text{C } (68^{\circ}\text{F})$

Partition coefficient: n-octanol/water: No data available.

Auto-ignition temperature: No data available.

Decomposition temperature: No data available.

Viscosity: No data available.

Specific gravity: No data available.





Section 10 - Stability and Reactivity

Reactivity: No data available. Chemical stability: This material is stable under normal handling and storage conditions. Possibility of hazardous reactions: No data available. Conditions to avoid (i.e. static discharge, shock or vibration): Exposure to moisture. Incompatible materials: Strong oxidizing agents. Hazardous decomposition products: Oxides of phosphorus, oxides of potassium. **Section 11- Toxicological Information** Likely routes of exposure: Inhalation, ingestion, skin and eye contact. Symptoms related to physical, chemical and toxicological characteristics and delayed and immediate effects and chronic effects from short and long term exposure: **Acute Toxicity:** Acute oral - Estimated LD50 = >2,000 mg/kg (rat). Acute dermal - Estimated LD50 = >4,640 mg/kg (rabbit) Skin corrosion/irritation: No data available. Serious eye damage/eye irritation: No data available. Respiratory or skin sensitization: No data available.

Carcinogenicity/Mutagenicity:

No data available.





| Section 11- Toxicological Information | (cont.) |
|---------------------------------------|---------|
|---------------------------------------|---------|

| Germ cell mutagenicity: |
|--|
| No data available. |
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| Reproductive toxicity: |
| No data available. |
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| Specific target organ toxicity - single or repeated exposure: |
| No data available. |
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| Aspiration hazard: |
| No data available. |
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| Symptoms after inhalation: |
| No data available. |
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| Symptoms after skin contact: |
| No data available. |
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| Symptoms after eye contact: |
| No data available. |
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| Symptoms after ingestion: May cause intestigal instability if ingested |
| May cause intestinal irritation if ingested. |
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| ction 12- Ecological Information |
| Ecotoxicity (aquatic and terrestrial, where available): |
| Toxicity to fish (acute and chronic): |
| No data available. |
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| Toxicity to daphnia and other aquatic invertebrates (acute and chronic): |
| No data available. |
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| Toxicity to algae: |
| No data available. |





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Section 12- Ecological Information (cont.)

Persistence and degradability:

No data available.

Bioaccumulative potential:

No data available.

Mobility in the soil:

No data available.

Other adverse effects:

No data available.

Section 13 - Disposal Considerations

Waste treatment methods - product:

Pesticide disposal: To avoid wastes, use all materials in this container by application according to label directions. If wastes cannot be avoided, send remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

Waste treatment methods - container:

Non-refillable container; do not reuse or refill this container. Completely empty bag contents into application equipment by shaking or tapping sides and bottom to loosen clinging particles; then offer for recycling, if available, or dispose of empty bag in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

Section 14 - Transport Information - US DOT, IATA, IMO, ADR:

Proper Shipping Name: Fertilizing Compound, NOI, Dry - Monopotassium Phosphate - Nutrol

D. O. T. Hazard Class: Not regulated by D.O.T. UN #: N/A

Label Requirement: None RQ: N/A

Placard: None CAS: 7778-77-0

Packing Group: N/A ERG Book Information: None.

Environment Hazards: No Marine Pollutant: No

Special Precautions: No IATA: Not regulated as dangerous goods.

Section 15 - Regulatory Information

FIFRA Statement:

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label includes other important information, including directions for use.

Keep Out of Reach of Children
CAUTION





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Section 15 - Regulatory Information (cont.)

U.S. Federal - OSHA Status:

This product does NOT contain any products considered hazardous under the Federal OSHA HazCom. Standard 29 CFR 1910.1200.

TSCA Status:

Listed/Non-reportable

SARA Title III Section 302 - EXTREMELY HAZARDOUS SUBSTANCES:

This product does NOT contain ingredients listed in Appendix A and B as Extremely Hazardous substances.

SARA Title III Sections 311/312:

N/A

SARA Section 313:

This product contains the following toxic chemical subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act:

CAS# Chemical Name:

This material does NOT contain any chemical components with known CAS numbers that exceed the threshold reporting levels.

SARA Superfund Section 110:

This product does NOT contain ingredients listed as hazardous substances on the Priority List of CERCLA Hazardous substances.

CERCLA, 40 CFR 117, 302:

This product does NOT contain ingredients specified in the List of Extremely Hazardous Substances.

CERCLA listed substances are:

none

Other Federal Reporting Requirements:

CAA: This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act

CWA: No chemicals in product are listed a Hazardous Substances, Priority Pollutants or Toxic Pollutants under the CWA.

RCRA: Not considered a hazardous waste.

State Reporting Requirements:

State Right to Know Laws:

CAS# State RTK Chemical Name

None

CALIFORNIA PROPOSITION 65:

This product does NOT contain any chemicals which require warning under California Proposition 65.

Michigan Critical Materials:

This product does NOT contain ingredients listed on the Michigan Critical Materials Register.





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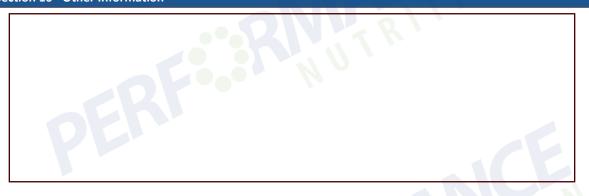
Section 15 - Regulatory Information (cont.)

Global Lists/International Inventories:

Canada CEPA: All intentional ingredients are listed on DSL.

Canada WHMIS: Not controlled.

Section 16 - Other Information





Date of last revision:

5/30/2015

NOTICE: OSHA STANDARD 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a Hazard Communication Program including training, labeling, Safety Data Sheets, and access to written records. We request that you, and it is your legal duty, make all information in this Safety Data Sheet available to your employees.

Key Legend Information:

N/Ap: Not Applicable
N/R: Not Rated
ACGI American Conference of Govr'ntal Industrial Hygienists
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit

IARC: International Agency for Research on Cancer
SARA Title III: Superfund Amendments and Reauthorization Act

CAA: Clean Air Act

RCRA: Resource Conservation Recovery Act

IATA: International Air Transport Association Shipping Info.

DSL: Domestic Substance List (Canada)

ND: Not Determined
 NDA: No Data Available
 TLV: Threshold Limit Value
 TWA: Time Weighted Average
 NTP: National Toxicology Program
 TSCA: Toxic Substance Control Act

CERCLA: Comprehensive Response, Compensation and Liability Act

CWA: Clean Water Act

IMO: International Maritime Organization Shipping Info. WHMIS: Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This Safety Data Sheet was prepared to comply with OSHA Hazard Communication standard. (29 CFR 1910.1200 HazCom 2012). This supersedes any previous information. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by LidoChem, Inc. as to the effects of such use or the results to be obtained, nor does LidoChem,Inc. assume any liability arising out of use, by others, of the products referred to herein. Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist because of applicable laws or government regulations. All LidoChem Inc. SDS's are reviewed every three years or sooner if necessary. Please check the Review Date on Page 1 for most current version. Please request a new SDS from LidoChem, Inc. if the date is older than 3 years.