Section 1: Chemical Product and Company Information

Product name: Potassium Phosphate, Monobasic
Reference Number: n/a
Supplier/ Further Information: Martrex, Inc.
   P. O. Box 1709
   14525 Highway 7
   Minnetonka, Minnesota 55345-3793
   Phone: 952/933-5000
   Toll Free: 800/328-3627
   FAX: 952/933-1889
EPA Registration Number: n/a
CAS#: 7778-77-0
Chemical Name: Potassium Phosphate, Monobasic
Synonyms: Potassium Phosphate, Monobasic, Crystal, MKP, Monopotassium Phosphate
Chemical Family: Inorganic salt
Product Use: n/a
MSDS Number: n/a

24 Hour Emergency Phone - Chemtrec Transport: 1-800-424-9300; Medical: 1-800-441-3637

Section 2: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous Component</th>
<th>CAS#</th>
<th>%</th>
<th>OSHA Limits</th>
<th>ACGIH Limits</th>
<th>OTHER Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Phosphate, Monobasic</td>
<td>7778-77-0</td>
<td>99+ %</td>
<td>no data</td>
<td>no data</td>
<td>no data</td>
</tr>
</tbody>
</table>

Section 3: Hazards Identification

Emergency Overview

NFPA Ratings: Health: 0  Flammability: 0  Reactivity: 0
OSHA Hazards: No known OSHA hazards
GHS Classification: Acute toxicity, Dermal (Category 5)
GHS Label elements, including precautionary statements
   Pictogram: none
   Signal word: Warning
   Hazard statement(s): H313: May be harmful in contact with skin
   Precautionary statement(s): none

Potential Health Effects

   Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
   Skin: May be harmful if absorbed through skin. May cause skin irritation.
   Eyes: May cause eye irritation.
   Ingestion: May be harmful if swallowed.

Carcinogenicity Data: no data
   See Section 11 for more Toxicological information
Section 4: First Aid Measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.  
Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. 
Skin Exposure: Wash off with soap and plenty of water. Consult a physician. 
Eye Exposure: Flush eyes with water as a precaution. Consult a physician. 
Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. 
NOTE TO THE PHYSICIAN: Treat symptomatically and supportively.

Section 5: Fire Fighting Measures

Conditions of Flammability: Not flammable or combustible. 
Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. 
Special protective equipment for fire-fighters Wear self contained breathing apparatus for fire fighting if necessary. 
Hazardous combustion products Hazardous decomposition products formed under fire conditions: Oxides of phosphorus, Potassium oxides 
Further information: The product itself does not burn. 
Special Fire Fighting Information: Wear appropriate personal protective equipment as specified in Section 8. 
Hazardous Combustion Products: See Section 10 Reactivity: Hazardous Decomposition Products.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Avoid breathing dust. Wear appropriate personal protective as specified in Section 8. 
Environmental precautions: Do not let product enter drains. 
Methods and materials for containment and cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. 
Environmental and Regulatory Reporting: See Sections 12, 13 and 15

Section 7: Handling and Storage

Precautions for safe handling: Provide appropriate exhaust ventilation at places where dust is formed. 
Conditions for safe storage: Keep container tightly closed in a dry and well-ventilated place. 
Keep in a dry place

Section 8: Exposure Controls / Personal Protection

Contains no substances with occupational exposure limit values. 
Personal protective equipment: Respiratory protection: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Hand protection:
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection:
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection:
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures:
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9: Physical and Chemical Properties

Chemical Name: Potassium Phosphate, Monobasic
Percent Equivalent: 99+%
Physical State: solid powder
Color and Appearance: white
Odor: no data
Odor Threshold: no data
pH: no data
Melting point/freezing point: Melting point/range: 252.6 °C (486.7 °F)
Boiling Point: no data
Flash Point: no data
Ignition Temperature: no data
Autoignition Temperature: no data
Lower explosive limit: no data
Upper explosive limit: no data
Vapor Pressure: no data
Density: 2.338 g/mL at 25 °C (77 °F)
Solubility in water: no data
Partition coefficient n-octanol/water: no data
Relative vapor density: no data
Evaporation Rate: no data
Chemical Formula: KH₂PO₄
Formula Wt: 136.0857 g/mol

Section 10: Stability and Reactivity

Chemical Stability (stable under normal temperature and pressures):

Stable X Unstable___

Possibility of hazardous reactions: no data
Conditions to Avoid: Exposure to moisture
Materials to Avoid: Strong Oxidizing agents
Hazardous Decomposition Products: Hazardous decomposition products formed under fire conditions - Oxides of phosphorus, Potassium oxide
Other decomposition products: no data
### Section 11: Toxicological Information

**Acute toxicity**
- **Oral LD$_{50}$**: no data available
- **Inhalation LC$_{50}$**: no data available
- **Dermal LD$_{50}$**: LD$_{50}$ Dermal - rabbit - > 4,640 mg/kg
- **Other information on acute toxicity**: no data available

**Skin corrosion/irritation**: no data available

**Serious eye damage/eye irritation**: no data available

**Respiratory or skin sensitization**: no data available

**Germ cell mutagenicity**: no data available

**Carcinogenicity**
- **IARC**: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **ACGIH**: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- **NTP**: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- **OSHA**: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**: no data available

**Teratogenicity**: no data available

**Specific target organ toxicity single exposure (Globally Harmonized System)**: no data available

**Specific target organ toxicity repeated exposure (Globally Harmonized System)**: no data available

**Aspiration hazard**: no data available

**Potential health effects**
- **Inhalation**: May be harmful if inhaled. May cause respiratory tract irritation.
- **Ingestion**: May be harmful if swallowed.
- **Skin**: May be harmful if absorbed through skin. May cause skin irritation.
- **Eyes**: May cause eye irritation.

**Signs and Symptoms of Exposure**: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Synergistic effects**: no data available

**Additional Information**: RTECS: TC661 5500

### Section 12: Ecological Information

**Toxicity**: no data available

**Persistence and Degradability**: no data available

**Bioaccumulative Potential**: no data available

**Mobility in Soil**: no data available

**PBT and vPvB Assessment**: no data available

**Other Adverse Effects**: no data available

### Section 13: Disposal Considerations

**Product**: Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**: Dispose of as unused product.

### Section 14: Transport Information

**DOT (US)**: Not dangerous goods

**IMDG**: Not dangerous goods

**IATA**: Not dangerous goods
Section 15: Regulatory Information

OSHA Hazards: No known OSHA hazards
SARA 302 Components: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards: No SARA Hazards
Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right To Know Components Cas# Potassium dihydrogenorthophosphate 7778-77-0
New Jersey Right To Know Components Cas# Potassium dihydrogenorthophosphate 7778-77-0
California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information

ACGIH - American Conference of Governmental Industrial Hygienists
ANSI - American National Standards Institute
CAS - Chemical Abstracts Service
CERCLA - Comprehensive Environmental Response, Compensation & Liability Act of 1980
CFR - Code of Federal Regulations
CHEMTREC - Chemical Transportation Emergency Center
CPR - Controlled Products Regulations
CWC - Chemical Weapons Convention
DOT - U.S. Department of Transportation
DSL - Canadian Domestic Substance List
EHS - Extremely Hazardous Substance
EPA - U.S. Environmental Protection Agency
HMIS - Hazardous Material Identification System
IARC - International Agency for Research on Cancer
LEL/UEL - Lower and Upper Explosive Limit
mg/m³ - Milligrams per cubic meter
MSDS - Material Safety Data Sheet
NAERG - North American Emergency Response Guidebook
NIOSH - National Institute of Occupational Safety and Health
NFPA - National Fire Protection Association

24 Hour Emergency Phone - Chemtrec: 1-800-424-9300 Transportation 1-800-441-3637 Medical
NTP - National Toxicology Program
OSHA - Occupational Safety and Health Administration
PEL - Permissible Exposure Limit (set by OSHA)
PPE - Personal Protective Equipment
RCRA - Resource Conservation and Recovery Act of 1976
SARA - Superfund Amendments and Reauthorization Act
TDG (Canadian): Transport of Dangerous Goods Regulations
TLV - Threshold Limit Value (set by ACGIH)
TWA - 8-hour Time Weighted Average
TSCA - US Toxic Substance Control Act
WHMIS - Workplace Hazardous Material Information System

MSDS Issue Date: n/a
Revised Date: 11-10-2011
Supersedes: n/a

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