

# Safety Data Sheet



## Martrex, Inc.

### Section 1: Chemical Product and Company Information

**Product name:** Potassium Phosphate, Monobasic

**Reference Number:** n/a

**Supplier/ Further Information:** Martrex, Inc.

1107 Hazeltine Blvd,  
Suite 535 MD 27,  
Chaska, Minnesota 55318

**Phone:** 952/933-5000

**Toll Free:** 800/328-3627

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**Web:** [www.martrexinc.com](http://www.martrexinc.com)

**EPA Registration Number:** n/a

**CAS#:** 7778-77-0

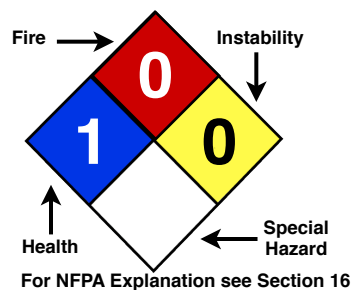
**Chemical Name:** Potassium Phosphate, Monobasic

**Synonyms:** Potassium Phosphate, Monobasic, Crystal, MKP,  
Monopotassium Phosphate

**Chemical Family:** Inorganic salt

**Product Use:** n/a

**SDS Number:** n/a



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### Section 2: Hazards Identification

#### Emergency Overview

**Warning!** Harmful if swallowed. Causes severe eye irritation.

**GHS Classification** (Global Harmonized Classification see Section 16):

**Acute toxicity, Oral** Category 4 (H302)

**Serious eye damage/eye irritation** Category 2B (H319)

**GHS Label, Hazards and Precautionary Statements**

**GHS Pictogram:**



(GHS Pictogram Hazards Definitions See Section 16)

**Label Signal Word:** **Warning**

**Hazard Statements:**

**Harmful if swallowed** (H302)

**Causes serious eye irritation.** (H319)

**Precautionary Statements:**

**Prevention:**

Wash skin thoroughly after handling. (P264)

Do not eat, drink or smoke when using this product. (P270)

Wear eye protection, face protection. (P280)

**Response:**

**IF SWALLOWED:** Rinse mouth. (P301+P330)

Call **POISON CENTER, doctor** if you feel unwell. (P312)

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**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)

**If eye irritation persists:** Get medical attentions. (P337+P313)

**Disposal Considerations:**

Dispose of content/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. (P501)

**NFPA Ratings:** Health: **1** 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 3: Composition/Information on Ingredients

Hazardous Component	CAS#	%	OSHA Limits	ACGIH Limits	OTHER Limits
Potassium Phosphate, Monobasic	7778-77-0	99+%	no data	no data	no data

### 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.

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## 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.

## 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

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**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:** KH<sub>2</sub>PO<sub>4</sub>  
**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<sub>50</sub> (Mouse):** Approximate 1,700 mg/kg

**Inhalation LC<sub>50</sub>:** no data available

**Dermal LD<sub>50</sub> (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

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## 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:** The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

## Section 13: Disposal Considerations

**Product Disposal:** Offer surplus and non-recyclable solutions to a licensed disposal company. The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Contaminated Packaging Disposal:** Dispose of as unused product. Since emptied containers retain product residue, follow label warnings even after container is emptied.

## Section 14: Transport Information

**DOT (US):** Not regulated

**IMDG:** Not regulated

**IATA:** Not regulated

## 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**

Potassium dihydrogenorthophosphate

**Cas#**

7778-77-0

**New Jersey Right To Know Components**

Potassium dihydrogenorthophosphate

**Cas#**

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

### Acronyms

**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

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**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/m<sup>3</sup>** - Milligrams per cubic meter  
**NAERG** - North American Emergency Response Guidebook  
**NIOSH** - National Institute of Occupational Safety and Health  
**NFPA** - National Fire Protection Association


**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  
**SDS** - Safety Data Sheet  
**STEL** - Concentration to which workers can be exposed continuously for a **short** period of time without suffering from irritation, irreversible tissue damage or narcosis of sufficient degree to increase the likelihood of accidental injury, impair self-rescue or materially reduce work efficiency.

**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

### GHS Pictograms and Hazards

<b>Health Hazard</b>  <ul style="list-style-type: none"> <li>• Carcinogen</li> <li>• Mutagenicity</li> <li>• Reproductive Toxicity</li> <li>• Respiratory Sensitizer</li> <li>• Target Organ Toxicity</li> <li>• Aspiration Toxicity</li> </ul>	<b>Flame</b>  <ul style="list-style-type: none"> <li>• Flammables</li> <li>• Pyrophorics</li> <li>• Self-Heating</li> <li>• Emits Flammable Gas</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>	<b>Exclamation Mark</b>  <ul style="list-style-type: none"> <li>• Irritant (skin and eye)</li> <li>• Skin Sensitizer</li> <li>• Acute Toxicity (harmful)</li> <li>• Narcotic Effects</li> <li>• Respiratory Tract Irritant</li> <li>• Hazardous to Ozone Layer (Non-Mandatory)</li> </ul>
<b>Gas Cylinder</b>  <ul style="list-style-type: none"> <li>• Gases Under Pressure</li> </ul>	<b>Corrosion</b>  <ul style="list-style-type: none"> <li>• Skin Corrosion/ Burns</li> <li>• Eye Damage</li> <li>• Corrosive to Metals</li> </ul>	<b>Exploding Bomb</b>  <ul style="list-style-type: none"> <li>• Explosives</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>
<b>Flame Over Circle</b>  <ul style="list-style-type: none"> <li>• Oxidizers</li> </ul>	<b>Environment (Non-Mandatory)</b>  <ul style="list-style-type: none"> <li>• Aquatic Toxicity</li> </ul>	<b>Skull and Crossbones</b>  <ul style="list-style-type: none"> <li>• Acute Toxicity (fatal or toxic)</li> </ul>

NFPA Rating Explanation Guide					
Rating Number	Health Hazard	Flammability Hazard	Instability Hazard	Rating Symbol	Special Hazard
4	Can be lethal	Will vaporize and readily burn at normal temperatures	May explode at normal temperatures and pressures	ALK	Alkaline
3	Can cause serious or permanent injury	Can be ignited under almost all ambient temperatures	May explode at high temperature or shock	ACID	Acidic
2	Can cause temporary incapacitation or residual injury	Must be heated or high ambient temperature to burn	Violent chemical change at high temperatures or pressures	BIO	BioHazard
1	Can cause significant irritation	Must be preheated before ignition can occur	Normally stable. High temperatures make unstable	COR	Strong Corrosive
0	No Hazard	Will not burn	Stable	CRYO	Cryogenic
				OXY	Oxidizer
					Radioactive
				W	Reacts violently or explosively with water
				W OX	Reacts violently or explosively with water or oxidizer

This chart for reference only - For complete specifications consult the NFPA Standard

SDS Issue Date: n/a  
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