

SAFETY DATA SHEET

Preparation Date: 1/13/2015

Revision Date: 11/15/2018

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: PO200
Product Name: MONOBASIC POTASSIUM PHOSPHATE, CRYSTAL, NF

Other means of identification

Synonyms: Monopotassium Phosphate; Potassium Dihydrogen Phosphate; Phosphoric Acid, Monopotassium salt
CAS #: 7778-77-0
RTECS # TC6615500
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: In baking powder.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: <https://www.spectrumchemical.com>
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Not classified

Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Potassium Phosphate Monobasic	7778-77-0	100

4. FIRST AID MEASURES

First aid measures

- General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.
- Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops. Consult a physician if necessary.
- Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.
- Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
- Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

- Symptoms**
- May cause eye/skin irritation
 - May cause digestive (gastrointestinal) tract irritation
 - May cause abdominal discomfort
 - May cause nausea and vomiting
 - May cause diarrhea

Indication of any immediate medical attention and special treatment needed

- Notes to Physician:** Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

- Suitable Extinguishing Media:** The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.
- Unsuitable Extinguishing Media:** No information available.
- Specific hazards arising from the chemical**
- Hazardous Combustion Products:** Oxides of phosphorus. Potassium oxides.
- Specific hazards:** No information available.

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Special Protective Actions for Firefighters

Specific Methods: No information available.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Hygroscopic. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Strong bases
Strong oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Potassium Phosphate	7778-77-0	None	None	None	None

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Monobasic					
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Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Potassium Phosphate Monobasic	7778-77-0	None	None	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Potassium Phosphate Monobasic	7778-77-0	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:

Goggles or Safety glasses with side-shields.

Skin and body protection:

Long sleeved clothing
Chemical resistant apron
Gloves

Respiratory protection:

Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Solid

Appearance:

Crystals.

Color:

White.

Odor:

Odorless.

Taste

No information available.

Formula:

KH₂PO₄

Molecular/Formula weight (g/mole):

136.09

Flammability:

No information available

Flashpoint (°C/°F):

No information available.

Flash Point Tested according to:

Not available

Autoignition Temperature (°C/°F):

No information available

Lower Explosion Limit (%):

No information available

Upper Explosion Limit (%):

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No information available

Melting point/range(°C/°F):
253 °C/487.4 °F

Decomposition temperature(°C/°F):
No information available

Boiling point/range(°C/°F):
No information available

Bulk density:
No information available

Density (g/cm3):
2.34

Specific gravity:
No information available

pH:
4.1-4.5 (pH of a 5% solution)

Vapor pressure @ 20°C (kPa):
No information available

Evaporation rate:
No information available

Vapor density:
No information available

VOC content (g/L):
No information available

Odor threshold (ppm):
No information available

**Partition coefficient
(n-octanol/water):**
No information available

Viscosity:
No information available

Miscibility:
No information available

Solubility:
Soluble in Water
Solubility in Water: 25 g/100 ml at 25
deg. C
Insoluble in Alcohol

10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents
Reacts with strong bases

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Exposure to moisture. Incompatible materials.

Incompatible Materials: Strong bases
Strong oxidizing agents

Hazardous decomposition products: Phosphorus oxides. Oxides of potassium.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion. Inhalation.

Acute Toxicity

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Component Information

Potassium Phosphate Monobasic	
CAS-No.	7778-77-0

LD50/oral/rat = = 3200 mg/kg Oral LD50 Rat
LD50/oral/mouse = 1700 mg/kg Oral LD50 Mouse
LD50/dermal/rabbit = >4640 mg/kg
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = 4640 mg/kg Oral LDL(lowest lethal dose) Rat

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = 3200 mg/kg

LD50/oral/mouse =
Value - Acute Tox Oral = 1700 mg/kg

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = > 4640 mg/kg

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Inhalation May cause irritation of respiratory tract.

Ingestion Acute potassium poisoning (hyperkalemia) by mouth is rare because large single doses usually induce vomiting and because in the absence of pre-existing kidney damage, potassium is rapidly excreted. However, if a significant amount of potassium is absorbed hyperkalemia may occur. Symptoms of hyperkalemia may include tiredness or weakness, a feeling of numbness or tingling of the extremities (paresthesia), trouble breathing, chest pain, heart palpitations or irregular heartbeat. Phosphates are toxic because of their ability to sequester calcium, but they are slowly and incompletely absorbed when ingested, and seldom result in systemic effects. The most frequently observed effect is gastrointestinal irritation, with abdominal pain, and cramping, vomiting and diarrhea. If ingestion of large doses occurs and if a significant amount of phosphate is absorbed, severe electrolyte (mineral) disturbances (imbalances) can occur resulting in hyperphosphatemia, hypocalcemia, hyperkalemia,

hypernatremia and hypomagnesemia. Symptoms may include anorexia, increased thirst (dehydration), metabolic acidosis, decrease in the amount of urine or in frequency of urination, intermittent polyuria (excessive urination or increase in urine volume), renal failure, trouble breathing and shortness of breath, tetany/carpopedal spasms, seizures/convulsions, tremor, dizziness, fatigue, lethargy, confusion, changes in mood such as anxiety, depression or irritability, weakness, muscle cramps, joint and bone pain, numbness or tingling, pain around the mouth or lips, hands or feet, weakness in the hands or feet, bradycardia (slow heartbeat) or tachycardia (fast heartbeat), dysrhythmias (cardiac arrhythmias), hypotension, cardiac arrest.

Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity No information available.

Sensitization: No information available.

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Potassium Phosphate Monobasic	7778-77-0	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target Organs: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Potassium Phosphate Monobasic	7778-77-0	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Class: No information available
Packing group: No information available
Emergency Response Guide Number: No information available
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: No Information available
Symbol(s): No information available
Description: No information available

TDG (Canada)

UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant: No Information available
Description: No information available

ADR

UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available

IMO / IMDG

UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available

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Packing Group: No information available
Marine Pollutant No information available

RID

UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

ICAO

UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

IATA

UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
ERG Code: No information available
Special Provisions No information available

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Potassium Phosphate Monobasic	7778-77-0	PresentACTIV E	Present KE-28622	Present	Present (1)-452	Present [22414]	Present	Present 231-913-4

U.S. Regulations

Potassium Phosphate Monobasic

FDA - 21 CFR - Total Food Additives 101.9, 160.110, 175.105
 - List Sourced from EAFUS

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Potassium Phosphate Monobasic	7778-77-0	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable	Section 302 Extremely Hazardous Substances	Section 302 Extremely Hazardous Substances and	Section 313 - Chemical Category	Section 313 - Reporting de minimis

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		Quantities	and TPQs	RQs		
Potassium Phosphate Monobasic	7778-77-0	None	None	None	None	None

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) - Health and Safety Reporting
Potassium Phosphate Monobasic	7778-77-0	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component
Potassium Phosphate Monobasic
7778-77-0 (100)

WHMIS 2015 Hazard Classification
Not a dangerous product according to HPR classification criteria

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Potassium Phosphate Monobasic	7778-77-0	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Potassium Phosphate Monobasic	7778-77-0	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Potassium Phosphate Monobasic	7778-77-0	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Potassium Phosphate Monobasic	7778-77-0	

EU - CLP (1272/2008)

R-phrase(s)

not determined (not applicable)

S -phrase(s)

none

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Potassium Phosphate Monobasic	7778-77-0		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

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Indication of danger:
Not dangerous

16. OTHER INFORMATION

Preparation Date: 1/13/2015
Revision Date: 11/15/2018
Prepared by: Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet