

SAFETY DATA SHEET

Preparation Date: 7/27/2014

Revision date 2/2/2018

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: P1386
Product Name: POTASSIUM PHOSPHATE DIBASIC, ANHYDROUS, BIOTECHGRADE

Other means of identification

Synonyms: Dipotassium Phosphate;
Dipotassium hydrogen phosphate;
Dipotassium monohydrogen phosphate;
Phosphoric acid, dipotassium salt

CAS #: 7758-11-4
RTECS # TC5580000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Buffer.
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: Tom Tyner (USA - West Coast)
Contact Person: Ibad Tirmiz (USA - East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by 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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Potassium Phosphate Dibasic, Anhydrous	7758-11-4	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	If it is involved in a fire the following can be released: Oxides of phosphorus. Potassium oxides.
Specific hazards	No information available.
<u>Special Protective Actions for Firefighters</u>	
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.
<u>Environmental precautions</u>	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. 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. Protect from moisture. 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:

Oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Potassium Phosphate Dibasic, Anhydrous	7758-11-4	None	None	None	None

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Potassium Phosphate Dibasic, Anhydrous	7758-11-4	None	None	None	None

Australia and Mexico

Component	CAS No	Australia	Mexico
Potassium Phosphate Dibasic, Anhydrous	7758-11-4	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:

Crystalline powder. Granular. Granular powder.

Color:

White. Off-white.

Odor:

Odorless.

Taste

No information available.

Formula

K₂HPO₄

Molecular/Formula weight (g/mole):

174.18

Flammability (solid, gas)

no data available

Flashpoint (°C/°F):

No information available

Product code: P1386

Product name: POTASSIUM
PHOSPHATE DIBASIC, ANHYDROUS,
BIOTECHGRADE

Page 4 / 11

Flash Point Tested according to: Not available	Autoignition Temperature (°C/°F): No information available	Lower Explosion Limit (%): No information available
Upper Explosion Limit (%): No information available	Melting point/range(°C/°F): ca. 340 °C/644 °F	Decomposition temperature(°C/°F): >465 °C/869 °F
Boiling point/range(°C/°F): No information available	Bulk density: No information available	Density (g/cm3): 2.3
Specific gravity: No information available	pH No information available	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: Very soluble in water Slightly soluble in alcohol	

10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents

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: 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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Product name: POTASSIUM
PHOSPHATE DIBASIC, ANHYDROUS,
BIOTECHGRADE

Page 5 / 11

Component Information

Potassium Phosphate Dibasic, Anhydrous	
CAS No	7758-11-4

LD50/oral/rat = No information available
LD50/oral/mouse = 1700mg/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 LC50information = No information available

Product Information

LD50/oral/rat =
Value - Acute Toxicity = No information available

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

LD50/dermal/rabbit
Value - Acute Toxicity = 4640 mg/kg

LD50/dermal/rat
VALUE - Acute Tox = 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.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Potassium Phosphate Dibasic, Anhydrous	7758-11-4	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 in soil No information available
Other adverse effects 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

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Potassium Phosphate Dibasic, Anhydrous	7758-11-4	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 Number Not regulated
Proper Shipping Name: No information available
Transport hazard class(es) No information available
Packing group No information available
Subsidiary Risk: No information available

IMDG

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

RID

UN Number Not regulated
Proper Shipping Name: No information available
Transport hazard class(es) No information available
Subsidiary Risk: No information available
Packing group No information available

ICAO (air)

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 Number Not regulated
Proper Shipping Name: No information available
Transport hazard class(es) No information available
Subsidiary Risk: No information available
Packing group No information available
Precautionary Statements - Response No information available
Special Provisions No information available

15. REGULATORY INFORMATION**International Inventories**

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Potassium Phosphate Dibasic, Anhydrous	7758-11-4	PresentACTIV E	Present KE-12167	Present	Present (1)-452	Present	Present	Present 231-834-5

U.S. Regulations

Potassium Phosphate Dibasic, Anhydrous

FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 182.6285

FDA - 21 CFR - Total Food Additives 133.169, 133.173, 133.179, 175.105, 182.6285, 73.85

- 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)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive	Female Reproductive

				Toxicity	Toxicity:
Potassium Phosphate Dibasic, Anhydrous	7758-11-4	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Component	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Potassium Phosphate Dibasic, Anhydrous	7758-11-4	None	None	None	None	None

U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Potassium Phosphate Dibasic, Anhydrous	7758-11-4	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component
Potassium Phosphate Dibasic, Anhydrous
7758-11-4 (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

DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Potassium Phosphate Dibasic, Anhydrous	7758-11-4	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Potassium Phosphate Dibasic, Anhydrous	7758-11-4	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Potassium Phosphate Dibasic, Anhydrous	7758-11-4	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Potassium Phosphate Dibasic, Anhydrous	7758-11-4	

EU - CLP (1272/2008)

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PHOSPHATE DIBASIC, ANHYDROUS,
BIOTECHGRADE

Page 10 / 11

R-phrase(s)

not determined (not applicable)

S -phrase(s)

none

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Potassium Phosphate Dibasic, Anhydrous	7758-11-4		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC**Indication of danger:**

Not dangerous

16. OTHER INFORMATION

Preparation Date: 7/27/2014
Revision date 2/2/2018
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