

Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name	● Monopotassium Phosphate, Anhydrous
Synonyms	● MKP; Potassium Dihydrogen Phosphate; Potassium Phosphate Monobasic
CAS Number	● 7778-77-0
SDS Number/Grade	● 28
EC Number	● 231-913-4
REACH Pre-Registration Number	● 17-2119417971-37-000
Molecular Formula	● KH ₂ PO ₄
Molecular Weight	● 136.09

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s)	● Buffers in foodstuffs; Ingredients in emulsifying salts for processed cheese products; Culture nutrients in pharmaceutical manufacture; Dietary supplement; Sequestering agent
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1.3 Details of the supplier of the safety data sheet

Manufacturer	● Innophos 259 Prospect Plains Rd. Bldg A Cranbury, NJ 08512-3706 United States
Telephone (Technical)	● 609-495-2495
Responsible Party - EU	● LSR Associates Ltd Woolley Road Alconbury, Cambridgeshire PE28 4HS United Kingdom info@lsr-associates.com
Telephone (General)	● +44 (0) 1954 212132

1.4 Emergency telephone number

Manufacturer	● 800-424-9300 - Chemtrec - within USA and Canada
Manufacturer	● +1 703-527-3887 - Chemtrec - outside USA and Canada (collect calls accepted)
Manufacturer	● 615-386-7816 - Innophos Emergency Communication Team (ECT)

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]
 According to: EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

- CLP ● Not classified
- DSD/DPD ● Not classified

2.2 Label Elements

- CLP
- Hazard statements** ● No label element(s) required
- DSD/DPD
- Risk phrases** ● No label element(s) required

2.3 Other Hazards

- CLP ● According to Regulation (EC) No. 1272/2008 (CLP) this material is not considered hazardous.
- DSD/DPD ● This product is not considered dangerous under the European Directive 67/548/EEC
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United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

- OSHA HCS 2012 ● Not classified

2.2 Label elements

- OSHA HCS 2012
- Hazard statements** ● No label element(s) required

2.3 Other hazards

- OSHA HCS 2012 ● This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.
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Canada

According to: WHMIS

2.1 Classification of the substance or mixture

- WHMIS ● Not classified

2.2 Label elements

- WHMIS ● No label element(s) required.

2.3 Other hazards

- WHMIS ● In Canada, the product mentioned above is not considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).
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Section 3 - Composition/Information on Ingredients

3.1 Substances

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Phosphoric acid, potassium salt (1:1)	CAS:7778-77-0 EC Number:231-913-4	100%	Skin-Rabbit LD50 • >4640 mg/kg	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA

3.2 Mixtures

- Material does not meet the criteria of a mixture in accordance with Regulation (EC) No 1272/2008.

Section 4 - First Aid Measures

4.1 Description of first aid measures

- Inhalation**
- If signs/symptoms develop, move person to fresh air. If signs/symptoms continue, get medical attention.
- Skin**
- In case of contact, immediately flush with plenty of water for at least 15 minutes. If irritation develops and persists, get medical attention. Take off contaminated clothing and wash before reuse.
- Eye**
- In case of contact with substance, immediately flush eyes with running water for at least 15 minutes. Seek immediate medical attention.
- Ingestion**
- Do not induce vomiting unless instructed to do so by a physician. If victim is conscious and alert, give 2-3 glasses of water to drink. Seek immediate medical attention. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to Physician**
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

4.4 Other information

- Call 911 or emergency medical service. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Section 5 - Firefighting Measures

5.1 Extinguishing media

- Suitable Extinguishing Media**
- Not combustible. Use extinguishing media suitable for surrounding fire.

- Unsuitable Extinguishing Media**
- None known.

5.2 Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- Non-combustible.

- Hazardous Combustion Products**
- Oxides of phosphorus, oxides of potassium.

5.3 Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA).

Structural firefighters' protective clothing will only provide limited protection.
Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal Precautions**
- Do not touch or walk through spilled material.
- Emergency Procedures**
- Use normal clean up procedures.

6.2 Environmental precautions

- Runoff from fire control or dilution water may cause pollution.

6.3 Methods and material for containment and cleaning up

- Containment/Clean-up Measures**
- Sweep or vacuum up and place in an appropriate closed container. Avoid generating dust.
Clean up residual material by washing area with water and detergent. Collect washings for disposal.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

- Handling**
- Keep containers closed when not in use. Avoid breathing dust. Avoid direct or prolonged contact with skin and eyes.

7.2 Conditions for safe storage, including any incompatibilities

- Storage**
- Store in a cool, dry place. This product is hygroscopic and tends to cake on storage.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

- Exposure Limits/Guidelines**
- No exposure limits were found for this product or any of its ingredients.

8.2 Exposure controls

- Engineering Measures/Controls**
- Dilution ventilation. Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.
- Personal Protective Equipment**
- Respiratory**
- For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.
- Eye/Face**
- Wear eye protection.
- Hands**
- Wear appropriate gloves.
- Skin/Body**
- Wear long sleeves and/or protective coveralls.
- General Industrial Hygiene Considerations**
- Wash hands before eating.

Environmental Exposure Controls

- Follow best practice for site management and disposal of waste.

Section 9 - Physical and Chemical Properties**9.1 Information on Physical and Chemical Properties**

Material Description			
Physical Form	Solid	Appearance/Description	White powder with no odor.
Color	White	Odor	Odorless
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point	253 C(487.4 F)
Decomposition Temperature	Data lacking	pH	4.5 @ 1 wt/wt%
Specific Gravity/Relative Density	= 1.25	Density	78.0373 lb(s)/ft ³
Water Solubility	Soluble 20 % @ 25 C(77 F)	Viscosity	Data lacking
Explosive Properties	Data lacking	Oxidizing Properties:	Data lacking
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	Data lacking
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity**10.1 Reactivity**

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- None known.

10.5 Incompatible materials

- None known.

10.6 Hazardous decomposition products

- Oxides of phosphorus. Oxides of potassium.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
Phosphoric acid, potassium salt (1:1) (100%)	7778-77-0	Acute Toxicity: Skin-Rabbit LD50 • >4640 mg/kg

GHS Properties	Classification
Acute toxicity	EU/CLP • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Data lacking; Acute Toxicity - Oral - Classification criteria not met OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Data lacking; Acute Toxicity - Oral - Classification criteria not met
Aspiration Hazard	EU/CLP • Not relevant OSHA HCS 2012 • Not relevant
Carcinogenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Germ Cell Mutagenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Skin corrosion/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Skin sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
STOT-RE	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
STOT-SE	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Toxicity for Reproduction	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Respiratory sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Serious eye damage/Irritation	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met

Route(s) of entry/exposure

- Inhalation, Skin, Eye, Ingestion

Medical Conditions Aggravated by Exposure

- Disorders of the lungs. Skin/Dermal .

Potential Health Effects

Inhalation

Acute (Immediate)

- Exposure to dust may cause irritation. Nuisance dust may affect the lungs but reactions are typically reversible.

Chronic (Delayed)

- No data available

Skin

Acute (Immediate)

- Exposure to dust may cause mechanical irritation.

Chronic (Delayed)

- No data available.

Eye

Acute (Immediate)

- Exposure to dust may cause mechanical irritation.

Chronic (Delayed)

- No data available.

Ingestion

Acute (Immediate)

- Low acute oral toxicity. Ingestion of large quantities may cause abdominal pain, abdominal cramps, nausea, vomiting, diarrhea.

Chronic (Delayed)

- No data available.

Key to abbreviations

LD = Lethal Dose

Section 12 - Ecological Information**12.1 Toxicity**

- No data found for product.

12.2 Persistence and degradability

- No data found for product.

12.3 Bioaccumulative potential

- No data found for product.

12.4 Mobility in Soil

- No data found for product.

12.5 Results of PBT and vPvB assessment

- PBT and vPvB assessment has not been carried out.

12.6 Other adverse effects**Ecological Fate**

- No data found for product.

Section 13 - Disposal Considerations**13.1 Waste treatment methods****Product waste**

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA

14.6 Special precautions for user

- None specified.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Data lacking.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • None

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Phosphoric acid, potassium salt (1:1)	7778-77-0	Yes	No	Yes	Yes	No

Inventory (Con't.)				
Component	CAS	New Zealand	Philippines PICCS	TSCA
Phosphoric acid, potassium salt (1:1)	7778-77-0	Yes	Yes	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Uncontrolled product according to WHMIS classification criteria
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Canada - WHMIS - Ingredient Disclosure List

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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Environment

Canada - CEPA - Priority Substances List

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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Germany

Environment

Germany - TA Luft - Types and Classes

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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Germany - Water Classification (VwVwS) - Annex 1

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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Germany - Water Classification (VwVwS) - Annex 3

• Phosphoric acid, potassium salt (1:1)	7778-77-0	ID Number 8173, hazard class 1 - low hazard to waters
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Philippines

Other

Philippines - Priority Chemical List

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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Singapore

Other**Singapore - Corrosive and Explosive Substances - Corrosive Substances**

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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United States**Labor****U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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U.S. - OSHA - Specifically Regulated Chemicals

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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Environment**U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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U.S. - CAA (Clean Air Act) - Class II Ozone Depletors

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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United States - California**Environment****U.S. - California - Proposition 65 - Carcinogens List**

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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U.S. - California - Proposition 65 - Developmental Toxicity

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Phosphoric acid, potassium salt (1:1)	7778-77-0	Not Listed
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U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Phosphoric acid, potassium salt (1:1)

7778-77-0

Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Last Revision Date

- 20/February/2015

Preparation Date

- 13/August/2004

Disclaimer/Statement of Liability

- The information herein is given in good faith but no warranty, expressed or implied, is made.

Key to abbreviations

NDA = No Data Available