



MONOPOTASSIUM PHOSPHATE

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Revision date: 24/04/2012

Version: 6.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Substance
Trade name	: MONOPOTASSIUM PHOSPHATE
Chemical name	: Potassium dihydrogenorthophosphate
EC no	: 231-913-4
CAS No.	: 7778-77-0
REACH registration No.	: 01-2119490224-41-0000
Product code	: PR-010
Formula	: KH ₂ PO ₄
Synonyms	: Potassium dihydrogen orthophosphate; Potassium phosphate monobasic; MKP; Hortipray MKP
Product group	: phosphates

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

1.2.1. Relevant identified uses

Use of the substance/preparation	: Substance used as such, in formulation or in formulation of products for : Fire resistant powder Horticulture Fertilizer Ceramics Textile industries Air care Detergent PC 37:Water treatment
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1.2.2. Uses advised against

Title	Use descriptors	Reason
Monopotassium phosphate		None

Full text of use descriptors: see section 16.

1.3. Details of the supplier of the safety data sheet

PRAYON S.A.
Rue Joseph Wauters, 144
B-4480 Engis - Belgique-Belgium
T +32 (0)4 273 92 11 - F +32 (0)4 273 96 35
Reachcustomer@prayon.be - www.prayon.be

1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number
ICELAND	Iceland Poisons Information Centre Landspítali University Hospital	Fossvogi 108Reykjavik	+354 525 111 +354 543 2222
IRELAND (REPUBLIC OF)	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9Dublin	: +353 1 8379964
ISRAEL	Israel Poisons Information Centre Rambam Medical Centre	PO Box 9602 31096Haifa	+972 4 854 1900
UNITED KINGDOM	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BABelfast	0870 600 6266 (UK only),
UNITED KINGDOM	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QHBirmingham	0870 600 6266 (UK only)
UNITED KINGDOM	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XXCardiff	0870 600 6266 (UK only)
UNITED KINGDOM	NPIS Edinburgh (Scottish Poisons Information Bureau) Royal Infirmary of Edinburgh	51 Little France Crescent EH16 4SAEdinburgh	0870 600 6266 (UK only)
UNITED KINGDOM	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ERLondon	0870 243 2241
UNITED KINGDOM	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LPNewcastle	0870 600 6266 (UK only)

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Labelling not applicable

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : MONOPOTASSIUM PHOSPHATE
CAS No. : 7778-77-0
EC no : 231-913-4
EC index no :

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Potassium dihydrogenorthophosphate	(CAS No.)7778-77-0 (EC no)231-913-4	>= 99	Not classified

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Potassium dihydrogenorthophosphate	(CAS No.)7778-77-0 (EC no)231-913-4	>= 99	Not classified

Full text of R-, H- and EUH-phrases: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air. Take medical advice immediately. If breathing is difficult, give oxygen.

First-aid measures after skin contact : Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. Wash immediately with plenty of soap and water.

First-aid measures after eye contact : In case of eye contact, immediately rinse with clean water for 10-15 minutes. Take medical advice immediately.

First-aid measures after ingestion : Do not induce vomiting. Seek medical attention if ill effect develops. Immediately rinse mouth with water.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : No specific effects and/or symptoms have been reported or are known.

4.3. Indication of any immediate medical attention and special treatment needed

See Heading 4.1.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : CO2. Powder. Foam. Water spray.

5.2. Special hazards arising from the substance or mixture

Fire hazard : None.

Reactivity : Stable under normal conditions of handling and storage.

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5.3. Advice for firefighters

Protection during firefighting : Use water stream to cool containers. Wear self-contained breathing apparatus, rubber boots and thick rubber gloves.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : See section 8.2.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers, soils and natural waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Collect spill when it is dry. Wash thoroughly after handling.

6.4. Reference to other sections

See section 8 and 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe dust. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. In the event that dust and/or fine particles are generated with this product, it is prudent to minimize prolonged inhalation exposure to these forms not to exceed the occupational exposure limit. Remove contaminated clothing and shoes. Wash clothing before re-using.

Hygiene measures : When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

MONOPOTASSIUM PHOSPHATE(7778-77-0)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	4,07 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	3,04 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0,05 mg/l
PNEC aqua (marine water)	0,005 mg/l
PNEC aqua (intermittent, freshwater)	0,5 mg/l
PNEC (STP)	
PNEC sewage treatment plant	50 mg/l

8.2. Exposure controls

Appropriate engineering controls : Avoid dust production. Good ventilation of the workplace required.

Hand protection : Wear protective gloves.

Eye protection : Wear safety glasses with side shields according EN 166.

Skin and body protection : Wear closed protective clothing.

Respiratory protection : Approved dust respirator (type FFP2 in accordance with EN 140 or 149) should be used if airborne particles are generated when handling this material.

Environmental exposure controls : Avoid release to the environment.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Crystals.
Colour	: white.
Odour	: odourless.
Odour threshold	: No data available
pH	: 4,3 - 4,7 Solution of : 1%
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 253 °C
Freezing point	: No data available
Boiling point	: > 450 °C
Flash point	: Not flammable
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 4.5x10 ⁻¹⁵ Pa at 25°C Pa
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.3 +/- 0.1 (g/cm ³)
Solubility	: Water: 226 g/l 20°C
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of handling and storage.

10.2. Chemical stability

Stable under normal conditions of handling and storage.

10.3. Possibility of hazardous reactions

No.

10.4. Conditions to avoid

Moisture.

10.5. Incompatible materials

None.

10.6. Hazardous decomposition products

Phosphorus oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

MONOPOTASSIUM PHOSPHATE(7778-77-0)	
LD50 oral rat	> 2000 mg/kg (OECD 420)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402)
LC50 inhalation rat (mg/l)	0,83 mg/l (4h - OECD 403)

Skin corrosion/irritation	: Not irritating. rabbit pH: 4,3 - 4,7 Solution of : 1%
Serious eye damage/irritation	: Not irritating. rabbit pH: 4,3 - 4,7 Solution of : 1%

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Respiratory or skin sensitisation	: Did not cause sensitisation. mouse. OECD 429: LLNA
Germ cell mutagenicity	: Negative
Carcinogenicity	: Not a carcinogen suspected agent.
Reproductive toxicity	: NOAEL: 1000 mg/kg bw/day. OECD 422
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : This product does not present any particular risk for the environment.

MONOPOTASSIUM PHOSPHATE(7778-77-0)	
LC50 fish 1	> 100 mg/l (96h - Rainbow trout, OECD guideline 203)
EC50 Daphnia 1	> 100 mg/l (48h - Daphnia magna, OECD 202)
NOEC chronic algae	> 100 mg/l (72h - Desmodesmus subspicatus, OECD 201)
NOEC (additional information)	1000 mg/L ACTIVATED SLUDGE OECD 209

12.2. Persistence and degradability

MONOPOTASSIUM PHOSPHATE(7778-77-0)	
Persistence and degradability	Not relevant. (inorganic substance).

12.3. Bioaccumulative potential

MONOPOTASSIUM PHOSPHATE(7778-77-0)	
Bioaccumulative potential	No.

12.4. Mobility in soil

MONOPOTASSIUM PHOSPHATE(7778-77-0)	
Ecology - soil	No data available.

12.5. Results of PBT and vPvB assessment

MONOPOTASSIUM PHOSPHATE(7778-77-0)	
This substance/mixture does not meet the PBT criteria of REACH, annex XIII.	
This substance/mixture does not meet the vPvB criteria of REACH, annex XIII.	

12.6. Other adverse effects

Other adverse effects	: No.
Other information	: Phosphates are plant nutrient and as such may contribute to the growth of phytoplanktons in water.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Empty packaging can have residues or dusts and are subject to proper waste disposal, as above.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

No dangerous good in sense of transport regulations.

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

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14.6. Special precautions for user

14.6.1. Overland transport

Not applicable

14.6.2. Transport by sea

Not applicable

14.6.3. Air transport

Not applicable

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains no REACH candidate substance

Other regulations, restrictions and prohibition regulations : Not required.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No

SECTION 16: Other information

Indication of changes:

according to Regulation (EC) No. 1907/2006 (REACH).

Data sources : Reach dossier.

Abbreviations and acronyms : ADN: European Agreement concerning international carriage of Dangerous goods by Inland waterways
ADR: European Agreement concerning international carriage of Dangerous goods by Road
AF : Assessment factor
BCF : Bioconcentration factor
Bw: Body weight
CAS: Chemical Abstracts Service
CLP : Classification, labelling, packaging
CSR: Chemical Safety Report
DMEL : Derived maximum effect level
DNEL: Derivative No effect Level
EC: European Community
ELV : Emission limit values
EN: European Norm
EUH: European Hazard Statement
EWC : European Waste catalogue
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods
LC50: Median lethal concentration
LD50 : Median lethal dose
NOAEL : No-observed-adverse-effect-level
NOEC : No observed effect concentration
NOEL : No observed effect level
OEL : Operator exposure level
PBT: Persistent, bioaccumulative, Toxic
PEC : Predicted effect level
PNEC: Predicted No effect Concentration
REACH : Registration, evaluation and autorisation of chemicals
RID: Regulations concerning the international carriage of dangerous goods by rail
STEL: Short Term Exposure Limit
TWA : Time weighted average
vPvB: Very persistent, very bioaccumulative.

Training advice : None.

SDS EU (REACH Annex II)

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