

# Potassium dihydrogenphosphate cryst.

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 12/09/2012 Revision date 21/02/2018

**P0574**

Version: 2.0

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

#### 1.1. Product identifier

Product form : Substance  
 Trade name : Potassium dihydrogenphosphate cryst.  
 EC-No. : 231-913-4  
 CAS-No. : 7778-77-0  
 REACH registration No : 01-2119490224-41-xxxx  
 Product code : P0574  
 Formula : KH<sub>2</sub>PO<sub>4</sub>  
 Synonyms : Kaliumbiphosphat  
 Kaliumdihydrogenphosphat  
 Monobasic potassium phosphate.  
 Product group : Raw material

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

##### 1.2.1. Relevant identified uses

Main use category : Professional use  
 Industrial/Professional use spec : For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

##### Supplier

Duchefa Biochemie B.V.  
 A. Hofmanweg 71  
 2031 BH Haarlem - The Netherlands  
 T +31(0)23-5319093 - F +31(0)23-5318027  
[info@duchefa.nl](mailto:info@duchefa.nl)

#### 1.4. Emergency telephone number

Emergency number : Supplier contact information:  
 +31(0)23-5319093 (M-F 09:00-17:00)  
 +31(0)6-30109355 (outside office hours)

Organisation/Company	Address	Comment
World Health Organization world directory of poison centres	<a href="http://apps.who.int/poisoncentres/">http://apps.who.int/poisoncentres/</a>	Consult website for a local poison centre

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

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]

No labelling applicable

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name : Potassium dihydrogenphosphate cryst.  
CAS-No. : 7778-77-0  
EC-No. : 231-913-4

Name	Product identifier	%
Potassium dihydrogenphosphate	(CAS-No.) 7778-77-0 (EC-No.) 231-913-4	> 98

Full text of H-statements: 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 : Move to fresh air.  
First-aid measures after skin contact : Wash skin with mild soap and water.  
First-aid measures after eye contact : Rinse with water.  
First-aid measures after ingestion : Rinse mouth.

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

Symptoms/effects : Ingestion may cause nausea, vomiting and diarrhea.

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

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Alcohol resistant foam.  
Dry chemical powder.  
Carbon dioxide (CO<sub>2</sub>).  
Water spray.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : When heated to decomposition, emits toxic fumes: Phosphorus oxides.

### 5.3. Advice for firefighters

Firefighting instructions : Avoid (reject) fire-fighting water to enter environment.  
Protection during firefighting : Wear proper protective equipment.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

General measures : Wear suitable protective clothing.

**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 and public waters.

**6.3. Methods and material for containment and cleaning up**

Methods for cleaning up : Sweep up dry powder and dispose properly.

**6.4. Reference to other sections**

No additional information available

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety procedures.

**7.2. Conditions for safe storage, including any incompatibilities**

Storage conditions : Store in dry, well-ventilated area  
Store at ambient temperature.

**7.3. Specific end use(s)**

For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

<b>Potassium dihydrogenphosphate cryst. (7778-77-0)</b>	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	4,07 mg/m <sup>3</sup>
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	3,04 mg/m <sup>3</sup>
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****Hand protection:**

Type	Material	Permeation	Thickness (mm)	Standard
Gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,11	EN 374

**Eye protection:**

Safety glasses (to European standard EN 166 or equivalent)

### Skin and body protection:

Wear suitable protective clothing

### Respiratory protection:

Where excessive dust may result, wear approved mask. Type P1 (EN 143)

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystals.
Molecular mass	: 136,08 g/mol
Colour	: White to off-white.
Odour	: Odourless.
Odour threshold	: No data available
pH	: ≈ 4,4 (50 g/l, 20 °C)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: ≈ 253 °C
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 2,34 g/cm <sup>3</sup>
Solubility	: Water: ≈ 220 g/l (20 °C)
Log Pow	: 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

Bulk density : 1200 - 1400 kg/m<sup>3</sup>

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

**10.4. Conditions to avoid**

Overheating  
Water, humidity.

**10.5. Incompatible materials**

No additional information available

**10.6. Hazardous decomposition products**

When heated to decomposition, emits dangerous fumes:  
- Phosphorus oxides.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

Acute toxicity : Not classified

<b>Potassium dihydrogenphosphate cryst. (7778-77-0)</b>	
LD50 dermal rabbit	> 4640 mg/kg

Skin corrosion/irritation : Not classified  
pH: ≈ 4,4 (50 g/l, 20 °C)

Serious eye damage/irritation : Not classified  
pH: ≈ 4,4 (50 g/l, 20 °C)

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Other information : See actual entry in RTECS for complete information: TC6615500.

**SECTION 12: Ecological information****12.1. Toxicity**

No additional information available

**12.2. Persistence and degradability**

No additional information available

**12.3. Bioaccumulative potential**

No additional information available

**12.4. Mobility in soil**

No additional information available

**12.5. Results of PBT and vPvB assessment**

No additional information available

**12.6. Other adverse effects**

Additional information : Prevent entry to sewers and public waters. Avoid release to the environment

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Waste treatment methods : This product is not hazardous. Dispose in a safe manner in accordance with local/national regulations.

**SECTION 14: Transport information**

In accordance with ADN / ADR / IATA

ADR	IATA	ADN
<b>14.1. UN number</b>		
Not regulated	Not regulated	Not applicable
<b>14.2. UN proper shipping name</b>		
Not regulated	Not regulated	Not applicable
Not regulated	Not regulated	Not applicable
<b>14.3. Transport hazard class(es)</b>		
Not regulated	Not regulated	Not applicable
Not regulated	Not regulated	Not applicable
<b>14.4. Packing group</b>		
Not regulated	Not regulated	Not applicable
<b>14.5. Environmental hazards</b>		
Not regulated	Not regulated	Not applicable
No supplementary information available		

**14.6. Special precautions for user****. Overland transport**

Not regulated

**- Air transport**

Not regulated

**- Inland waterway transport**

Not applicable

**14.7. Transport in bulk according to Annex II of Marpol 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

Potassium dihydrogenphosphate cryst. is not on the REACH Candidate List

Potassium dihydrogenphosphate cryst. is not on the REACH Annex XIV List

**15.1.2. National regulations**

Ensure all national/local regulations are observed.

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P0574

## Safety Data Sheet

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### Germany

Reference to AwSV

: Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 3; ID No. 8173)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV

: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

### Netherlands

SZW-lijst van kankerverwekkende stoffen

: The substance is not listed

SZW-lijst van mutagene stoffen

: The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding

: The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid

: The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling

: The substance is not listed

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Indication of changes:

1.4	Emergency number	Modified	
8.1	Long-term - systemic effects, inhalation	Added	
8.1	Long-term - systemic effects, inhalation	Added	
8.1	PNEC aqua (freshwater)	Added	
8.1	PNEC aqua (marine water)	Added	
8.1	PNEC aqua (intermittent, freshwater)	Added	
8.1	PNEC sewage treatment plant	Added	
8.2	Hand protection	Modified	Specified material, thickness, et cetera of gloves

Abbreviations and acronyms:

ATE	Acute Toxicity Estimate
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet

Data sources : Supplier.

SDS Biochemicals version 2018

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P0574

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*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*