

Dipotassium hydrogen phosphate, anhydrous

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 12/04/2017 Version: 0.0

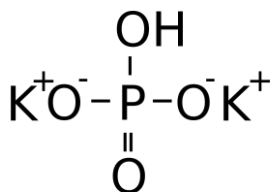
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance
Substance name : Dipotassium hydrogen phosphate, anhydrous
EC-No. : 231-834-5
CAS-No. : 7758-11-4
Type of product : Pure substance, Hygroscopic substance. Preventive measures apply to the substance in dry state only
Formula : K_2HPO_4
Chemical structure :



Synonyms : dibasic potassium phosphate, anhydrous / dikalium phosphate, anhydrous / dipotassium hydrogenorthophosphate, anhydrous / dipotassium monohydrogen phosphate, anhydrous / dipotassium monophosphate, anhydrous / dipotassium orthophosphate, anhydrous / dipotassium phosphate, anhydrous / dipotassium-o-phosphate, anhydrous / DKP, anhydrous / hydrogen dipotassium phosphate, anhydrous / orthophosphate dipotassium, anhydrous / phosphoric acid, dipotassium salt, anhydrous / potassium biphosphate, anhydrous / potassium dibasic phosphate, anhydrous / potassium hydrogen phosphate(=di potassium hydrogen phosphate) / potassium hydrogenphosphate, anhydrous / potassium monohydrogen orthophosphate, anhydrous / potassium monohydrogen phosphate, anhydrous / potassium orthophosphate, mono-H, anhydrous / potassium phosphate dibasic, anhydrous / sec-potassium phosphate, anhydrous / secondary potassium phosphate, anhydrous

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemical

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ISOLAB Laborgeräte GmbH
Am Dillhof 2 - 63863 Eschau / GERMANY
Tel: + 49 93 74 / 978 55-0
Fax: +49 93 74 / 978 55-29
prodsafe@isolab.de

1.4. Emergency telephone number

| Country | Organisation/Company | Address | Emergency number | Comment |
|---------|------------------------------------------------------------------|-----------------------------------|------------------|---------|
| Germany | Giftnotruf der Charité CBF, Haus VIII (Wirtschaftgebäude), UG | Hindenburgdamm 30 12203 Berlin | +49 30 19240 | |

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

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2.2. Label elements

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

EUH-statements : EUH210 - Safety data sheet available on request

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

| Name | Product identifier | % |
|-------------------------------------------|-------------------------------------------|-------|
| Dipotassium hydrogen phosphate, anhydrous | (CAS-No.) 7758-11-4 (EC-No.) 231-834-5 | >= 99 |

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 general | : If you feel unwell, seek medical advice. |
| First-aid measures after inhalation | : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service. |
| First-aid measures after skin contact | : Rinse with water. Soap may be used. Take victim to a doctor if irritation persists. |
| First-aid measures after eye contact | : Rinse with water. Take victim to an ophthalmologist if irritation persists. |
| First-aid measures after ingestion | : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Call Poison Information Centre (www.big.be/antigif.htm). Consult a doctor/medical service if you feel unwell. |

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

| | |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Symptoms/effects after inhalation | : AFTER INHALATION OF DUST: Coughing. Irritation of the nasal mucous membranes. |
| Symptoms/effects after skin contact | : Slight irritation. |
| Symptoms/effects after eye contact | : Slight irritation. |
| Symptoms/effects after ingestion | : AFTER ABSORPTION OF HIGH QUANTITIES: Feeling of weakness. Nausea. Vomiting. Diarrhoea. Disturbances of heart rate. |
| Chronic symptoms | : Slight irritation. ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Tingling/irritation of the skin. |

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 | : Adapt extinguishing media to the environment. |
| Unsuitable extinguishing media | : No unsuitable extinguishing media known. |

5.2. Special hazards arising from the substance or mixture

| | |
|------------------|--------------------------------------------------------|
| Fire hazard | : DIRECT FIRE HAZARD. Non combustible. |
| Explosion hazard | : DIRECT EXPLOSION HAZARD. No direct explosion hazard. |

5.3. Advice for firefighters

| | |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautionary measures fire | : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows. |
| Firefighting instructions | : Dilute toxic gases with water spray. |
| Protection during firefighting | : Heat/fire exposure: compressed air/oxygen apparatus. |

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Gloves. Protective clothing. Dust cloud production: compressed air/oxygen apparatus. See "Material-Handling" to select protective clothing.
- Emergency procedures : Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash contaminated clothes.
- Measures in case of dust release : In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

- For containment : Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray.
- Methods for cleaning up : Stop dust cloud by covering with sand/earth. Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

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 : Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Avoid raising dust. Keep away from naked flames/heat. Observe normal hygiene standards. Keep container tightly closed. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

7.2. Conditions for safe storage, including any incompatibilities

- Storage temperature : 20 °C
- Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources.
- Information on mixed storage : KEEP SUBSTANCE AWAY FROM: (strong) acids.
- Storage area : Store in a dry area. Keep container in a well-ventilated place. Meet the legal requirements.
- Special rules on packaging : SPECIAL REQUIREMENTS: hermetical. watertight. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
- Packaging materials : SUITABLE MATERIAL: cardboard. synthetic material.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Dipotassium hydrogen phosphate, anhydrous (7758-11-4) | | |
|-------------------------------------------------------|----------------------------------|----------------------------------------------------|
| Russian Federation | Local name | диКалий гидрофосфат |
| Russian Federation | OEL Ceiling (mg/m ³) | 10 mg/m ³ |
| Russian Federation | Remark (RU) | 4 класс опасности - умеренно опасное; а (аэрозоль) |

8.2. Exposure controls

Materials for protective clothing:

GIVE GOOD RESISTANCE: rubber

Hand protection:

Gloves

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Eye protection:

Safety glasses. In case of dust production: protective goggles

Skin and body protection:

Protective clothing

Respiratory protection:

Dust production: dust mask with filter type P1

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--------------------------------------------|-------------------------------------------|
| Physical state | : Solid |
| Appearance | : Crystalline solid. Powder. Grains. |
| Molecular mass | : 174.18 g/mol |
| Colour | : Colourless or white. |
| Odour | : Odourless. |
| Odour threshold | : No data available |
| pH | : 8.5 - 9.6 (%5) |
| pH solution | : 1 % |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : 340 °C (decomposition) |
| Freezing point | : No data available |
| Boiling point | : Not applicable |
| Flash point | : Not applicable |
| Auto-ignition temperature | : Not applicable |
| Decomposition temperature | : 340 °C |
| Flammability (solid, gas) | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : 2.3 |
| Density | : 2440 kg/m ³ (20 °C) |
| Solubility | : Soluble in water. Water: 160 g/100ml |
| 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

| | |
|-------------------------|----------------------------------------------|
| Minimum ignition energy | : Not applicable |
| VOC content | : Not applicable |
| Other properties | : Hygroscopic. Substance has basic reaction. |

SECTION 10: Stability and reactivity

10.1. Reactivity

On burning: release of toxic and corrosive gases/vapours (phosphorus oxides). Reacts violently with (some) acids.

10.2. Chemical stability

Hygroscopic.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

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10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

| Dipotassium hydrogen phosphate, anhydrous (7758-11-4) | |
|-------------------------------------------------------|------------------|
| LD50 oral rat | 8000 mg/kg (Rat) |

Skin corrosion/irritation : Not classified
pH: 8.8 (1 %)

Serious eye damage/irritation : Not classified
pH: 8.8 (1 %)

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

SECTION 12: Ecological information

12.1. Toxicity

Ecology - air : Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). TA-Luft Klasse 5.2.1.

Ecology - water : Mild water pollutant (surface water). Slightly harmful to fishes. May cause eutrophication.

| Dipotassium hydrogen phosphate, anhydrous (7758-11-4) | |
|-------------------------------------------------------|-----------------------------------------|
| LC50 fish 1 | > 900 mg/l (LC50; 48 h; Leuciscus idus) |

12.2. Persistence and degradability

| Dipotassium hydrogen phosphate, anhydrous (7758-11-4) | |
|-------------------------------------------------------|-----------------------------------|
| Persistence and degradability | Biodegradability: not applicable. |
| Biochemical oxygen demand (BOD) | Not applicable |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |

12.3. Bioaccumulative potential

| Dipotassium hydrogen phosphate, anhydrous (7758-11-4) | |
|-------------------------------------------------------|------------------------------------|
| Bioaccumulative potential | No bioaccumulation data 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

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Remove waste in accordance with local and/or national regulations. Remove to an authorized dump. Use appropriate containment to avoid environmental contamination.

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Additional information : LWCA (the Netherlands): KGA category 05. Can be considered as non hazardous waste according to Directive 2008/98/EC.

European List of Waste (LoW) code : 06 03 14 - solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13
16 05 09 - discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

| ADR | IMDG | IATA | ADN | RID |
|-----------------------------------------|----------------|----------------|----------------|----------------|
| 14.1. UN number | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.2. UN proper shipping name | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.3. Transport hazard class(es) | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.4. Packing group | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.5. Environmental hazards | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| No supplementary information available | | | | |

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail 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

Dipotassium hydrogen phosphate, anhydrous is not on the REACH Candidate List

Dipotassium hydrogen phosphate, anhydrous is not on the REACH Annex XIV List

VOC content : Not applicable

15.1.2. National regulations

Germany

VwVwS Annex reference : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 3; ID No. 8172)

WGK remark : Internal classification water polluting based on standard worst-case evaluation points due to insufficient data

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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

Abbreviations and acronyms:

| | |
|-------|---------------------------------------------------------------------------------------------------|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| CLP | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 |
| EC50 | Median effective concentration |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| PBT | Persistent Bioaccumulative Toxic |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| vPvB | Very Persistent and Very Bioaccumulative |

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H- and EUH-statements:

| | |
|--------|----------------------------------------|
| EUH210 | Safety data sheet available on request |
|--------|----------------------------------------|

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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