

**Safety data sheet
according to 1907/2006/EC, Article 31**

revised on: 04.01.2023

Version number 8 (replaces version 7)

Creation Date: 19.01.2011

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

- **1.1 Product identifier**
- **Trade name:** Potassium dihydrogen phosphate
- **Article number:** 1648, 1670
- **CAS Number:**
7778-77-0
- **EC number:**
231-913-4
- **Registration number** 01-2119490224-41-XXXX
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture**
Industrial use
Laboratory chemicals
Reagent for analysis
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Th. Geyer GmbH & Co. KG
Dornierstr. 4 – 6
D-71272 Renningen

Tel.: +49(0)7159-1637-0, Fax:+49 (0)7159/18417
www.thgeyer.de
sicherheitsdatenblaetter@thgeyer.de
- **Further information obtainable from:** Product management department
- **1.4 Emergency telephone number:**
National Poisons Information Service
City Hospital
Dudley Road
Birmingham B18 7QH
Tel.:Emergency: (00 44) 87 06 00 62 66
Members of the public seeking specific information on poisons should contact:
In England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The substance is not classified, according to the GB CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**
CAS: 7778-77-0 Potassium dihydrogenorthophosphate
- **Identification number(s)**
- **EC number:** 231-913-4

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**
First aider needs to protect himself.
Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Flush contaminated skijn with soap and plenty of water.
After prolonged contact or any signs of skin changes (redness or other signs of inflammation) seek medical attention.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
Remove contact lenses
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Consult a doctor if you feel unwell.
- **Information for doctor:** Please observe safety data sheet/label.
- **4.2 Most important symptoms and effects, both acute and delayed** Gastric or intestinal disorders
- **4.3 Indication of any immediate medical attention and special treatment needed** Symptomatic treatment.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet.
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Phosphorus oxides
Not combustible.
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
Do not inhale dust.
Use respiratory protective device against the effects of fumes/dust/aerosol.

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- **6.2 Environmental precautions:** Do not allow to enter sewers/surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
 - Cover drains.
 - Pick up mechanically.
 - Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
 - See Section 7 for information on safe handling.
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
 - Apply the general protection and hygiene measures for the handling with chemicals.
 - No special measures required.
- **Information about fire - and explosion protection:**
 - Substance itself does not burn, tuning measures to environment
- **7.2 Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
 - **Information about storage in one common storage facility:** Store away from metals.
 - **Further information about storage conditions:**
 - Store in dry conditions.
 - Protect from humidity and water.
 - **Storage class:** 13
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
 - **Appropriate engineering controls** No further data; see item 7.
 - **Individual protection measures, such as personal protective equipment**
 - **General protective and hygienic measures:**
 - The usual precautionary measures are to be adhered to when handling chemicals.
 - **Respiratory protection:** Not required.
 - **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
 Labsolute@protective

- **Material of gloves**
 - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
 - NBR: acrylonitrile-butadiene rubber
 - Material thickness > 0.11 mm
- **Penetration time of glove material**
 - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
 - level 6 for application > 480 min

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· Eye/face protection


Safety glasses

· Body protection:


Protective work clothing (e. g. safety shoes EN ISO 20345, long-sleeved protective working garments).

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties
· General Information
· Physical state

Solid

· Colour:

Colourless

· Odour:

Odourless

· Melting point/freezing point:

253 °C

· Boiling point or initial boiling point and boiling range

Undetermined.

· Flammability

Product is not flammable.

· Lower and upper explosion limit
· Lower:

Not determined.

· Upper:

Not determined.

· Flash point:

Not applicable.

· Decomposition temperature:

Not determined.

· pH

4.4

· Viscosity:
· Kinematic viscosity

Not applicable.

· Dynamic:

Not applicable.

· Solubility
· water at 20 °C:

222 g/l

· Partition coefficient n-octanol/water (log value)

Not determined.

· Vapour pressure:

Not applicable.

· Density and/or relative density
· Density at 20 °C:
2.23 g/cm³
· Relative density

Not determined.

· Bulk density:
1,200 kg/m³
· Vapour density

Not applicable.

· Particle characteristics

See item 3.

· 9.2 Other information
· Appearance:
· Form:

Solid

· Important information on protection of health and environment, and on safety.
· Auto-ignition temperature:

Not determined.

· Explosive properties:

Product does not present an explosion hazard.

· Molecular weight

136.09 g/mol

· Change in condition
· Evaporation rate

Not applicable.

· Information with regard to physical hazard classes
· Explosives

Void

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· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability** Stable with proper storage and handling.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Protect from humidity.
- **10.5 Incompatible materials:** Avoid contact with other chemicals.
- **10.6 Hazardous decomposition products:** On fire: see chapter 5

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Subacute to chronic toxicity:** -
- **11.2 Information on other hazards**
- **Endocrine disrupting properties** Substance is not listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods** Observe local (country-specific) regulations and laws
- **Recommendation**
Smaller quantities can be disposed of with household waste.
Chemicals must be disposed of in compliance with the respective national regulations.

- **European waste catalogue**

06 00 00	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 09 00	wastes from the MSFU of phosphorous chemicals and phosphorous chemical processes
06 09 99	wastes not otherwise specified

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|--|----------------------|
| · 14.1 UN number or ID number
· ADR, ADN, IMDG, IATA | not regulated |
| · 14.2 UN proper shipping name
· ADR, ADN, IMDG, IATA | not regulated |
| · 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | not regulated |
| · 14.4 Packing group
· ADR, IMDG, IATA | not regulated |
| · 14.5 Environmental hazards: | Not applicable. |
| · 14.6 Special precautions for user
· Hazard identification number (Kemler code): | Not applicable.
- |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · UN "Model Regulation": | not regulated |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Inventory of Hazardous Chemicals** Substance is not listed.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.

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- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
Substance is not listed.
- **REGULATION (EU) 2019/1148**
- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**
Substance is not listed.
- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS** Substance is not listed.
- **Regulation (EC) No 273/2004 on drug precursors** Substance is not listed.
- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**
Substance is not listed.
- **National regulations:**
- **Information about limitation of use:**
Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
Application, use and handling of our products take place out of our control and are solely your responsibility.

- **Department issuing SDS:** Product management
- **Contact:** Product management
- **Version number of previous version:** 7
- **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
- *** Data compared to the previous version altered.**

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