

## Potassium dihydrogen phosphate for cell biology

Version number: GHS 2.1  
Replaces version of: 2020-08-28 (GHS 1)

Revision: 2023-11-30

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

#### 1.1 Product identifier

<b>Identification of the substance</b>	<b>Potassium dihydrogen phosphate for cell biology</b>
<b>CAS number</b>	7778-77-0
<b>Article number</b>	1199

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

<b>Relevant identified uses</b>	General use
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#### 1.3 Details of the supplier of the safety data sheet

NeoFroxx GmbH  
Marie-Curie-Str. 3  
D-64683 Einhausen  
Germany

Telephone: +49 (6251) 989 24 - 0  
e-mail: info@neofroxx.com  
Website: neofroxx.com

**e-mail (competent person)** info@neofroxx.com (neoFroxx GmbH)

#### 1.4 Emergency telephone number

Poison centre			
Country	Name	Postal code/city	Telephone
United Kingdom	National Poisons Information Service		111

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification acc. to GHS

This substance does not meet the criteria for classification.

#### 2.2 Label elements

##### Labelling

not required

#### 2.3 Other hazards

##### Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

## Potassium dihydrogen phosphate for cell biology

Version number: GHS 2.1  
Replaces version of: 2020-08-28 (GHS 1)

Revision: 2023-11-30

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

<b>Name of substance</b>	Potassium dihydrogen phosphate for cell biology
<b>Identifiers</b>	
CAS No	7778-77-0
EC No	231-913-4

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

##### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

##### Following skin contact

Brush off loose particles from skin. Rinse skin with water/shower.

##### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

##### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

Symptoms and effects are not known to date.

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

none

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Water, Foam, Alcohol resistant foam, ABC-powder

##### Unsuitable extinguishing media

Water jet

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

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

## Potassium dihydrogen phosphate for cell biology

Version number: GHS 2.1  
Replaces version of: 2020-08-28 (GHS 1)

Revision: 2023-11-30

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

##### For non-emergency personnel

Remove persons to safety.

##### For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

#### 6.3 Methods and material for containment and cleaning up

##### Advice on how to contain a spill

Covering of drains, Take up mechanically

##### Advice on how to clean up a spill

Take up mechanically.

##### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

##### Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment.

- Specific notes/details

Dust deposits may accumulate on all deposition surfaces in a technical room.

##### Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

#### 7.2 Conditions for safe storage, including any incompatibilities

##### Managing of associated risks

- Explosive atmospheres

Removal of dust deposits.

- Ventilation requirements

Use local and general ventilation.

#### 7.3 Specific end use(s)

See section 16 for a general overview.

## Potassium dihydrogen phosphate for cell biology

Version number: GHS 2.1  
Replaces version of: 2020-08-28 (GHS 1)

Revision: 2023-11-30

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Ceiling-C [ppm]	Ceiling-C [mg/m <sup>3</sup> ]	Notation	Source
GB	dust		WEL		10					i	EH40/2005
GB	dust		WEL		4					r	EH40/2005

#### Notation

Ceiling-C	ceiling value is a limit value above which exposure should not occur
i	inhalable fraction
r	respirable fraction
STEL	short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

#### Human health values

Relevant DNELs and other threshold levels				
Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	14.82 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects

#### 8.2 Exposure controls

##### Appropriate engineering controls

General ventilation.

##### Individual protection measures (personal protective equipment)

##### Eye/face protection

Wear eye/face protection.

##### Skin protection

- Hand protection

Wear protective gloves.

- Type of material

NBR: acrylonitrile-butadiene rubber

- Material thickness

min. 0,11 mm

min. 0,11 mm

- Breakthrough times of the glove material

>480 minutes (permeation: level 6)

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

##### Respiratory protection

Particulate filter device (EN 143). P1 (filters at least 80 % of airborne particles, colour code: White).

## Potassium dihydrogen phosphate for cell biology

Version number: GHS 2.1  
Replaces version of: 2020-08-28 (GHS 1)

Revision: 2023-11-30

### Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	solid
<b>Colour</b>	white
<b>Odour</b>	characteristic
<b>Melting point/freezing point</b>	not determined
<b>Boiling point or initial boiling point and boiling range</b>	>723 K at 101,325 Pa
<b>Flammability</b>	non-combustible
<b>Lower and upper explosion limit</b>	not determined
<b>Flash point</b>	not applicable
<b>Auto-ignition temperature</b>	not determined
<b>Decomposition temperature</b>	not relevant
<b>pH (value)</b>	4.2 – 4.6 (in aqueous solution: 20 g/l, 20 °C)
<b>Kinematic viscosity</b>	not relevant

### Solubility(ies)

Water solubility	208 g/l at 20 °C
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### Partition coefficient

Partition coefficient n-octanol/water (log value)	not relevant (inorganic)
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Vapour pressure	0 Pa at 25 °C
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### Density and/or relative density

## Potassium dihydrogen phosphate for cell biology

Version number: GHS 2.1  
Replaces version of: 2020-08-28 (GHS 1)

Revision: 2023-11-30

Density	2.33 g/cm <sup>3</sup> at 21.5 °C
Relative vapour density	information on this property is not available

Particle characteristics	no data available
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### 9.2 Other information

<b>Information with regard to physical hazard classes</b>	hazard classes acc. to GHS (physical hazards): not relevant
<b>Other safety characteristics</b>	there is no additional information

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

### 10.5 Incompatible materials

There is no additional information.

### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Classification acc. to GHS

This substance does not meet the criteria for classification.

#### Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4: May be harmful in contact with skin.

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

#### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

## Potassium dihydrogen phosphate for cell biology

Version number: GHS 2.1  
Replaces version of: 2020-08-28 (GHS 1)

Revision: 2023-11-30

### **Germ cell mutagenicity**

Shall not be classified as germ cell mutagenic.

### **Carcinogenicity**

Shall not be classified as carcinogenic.

### **Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

### **Specific target organ toxicity - single exposure**

Shall not be classified as a specific target organ toxicant (single exposure).

### **Specific target organ toxicity - repeated exposure**

Shall not be classified as a specific target organ toxicant (repeated exposure).

### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

## **11.2 Information on other hazards**

There is no additional information.

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

Shall not be classified as hazardous to the aquatic environment.

### **12.2 Persistence and degradability**

Data are not available.

### **12.3 Bioaccumulative potential**

Data are not available.

### **12.4 Mobility in soil**

Data are not available.

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

According to the results of its assessment, this substance is not a PBT or a vPvB.

### **12.6 Endocrine disrupting properties**

Information on this property is not available.

### **12.7 Other adverse effects**

Data are not available.

## **SECTION 13: Disposal considerations**

### **13.1 Waste treatment methods**

#### **Waste treatment-relevant information**

Recycling/reclamation of other inorganic materials.

#### **Sewage disposal-relevant information**

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

#### **Waste treatment of containers/packagings**

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

## Potassium dihydrogen phosphate for cell biology

Version number: GHS 2.1  
Replaces version of: 2020-08-28 (GHS 1)

Revision: 2023-11-30

### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

- 14.1 UN number or ID number** not subject to transport regulations
- 14.2 UN proper shipping name** not relevant
- 14.3 Transport hazard class(es)** none
- 14.4 Packing group** not assigned
- 14.5 Environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 Special precautions for user**  
There is no additional information.
- 14.7 Maritime transport in bulk according to IMO instruments**  
The cargo is not intended to be carried in bulk.

### Information for each of the UN Model Regulations

#### International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

#### International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

##### Deco-Paint Directive

VOC content	0 %
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##### Industrial Emissions Directive (IED)

VOC content	0 %
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##### Water Framework Directive (WFD)

not listed

##### Regulation on persistent organic pollutants (POP)

not listed

##### National inventories

Country	Inventory	Status
EU	REACH Reg.	substance is listed

##### Legend

REACH Reg. REACH registered substances



**Potassium dihydrogen phosphate for cell biology**

Version number: GHS 2.1  
Replaces version of: 2020-08-28 (GHS 1)

Revision: 2023-11-30

**15.2 Chemical safety assessment**

No Chemical Safety Assessment has been carried out for this substance.

**SECTION 16: Other information**

**Indication of changes (revised safety data sheet)**

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
1.1	Registration number (REACH): 01-2119490224-41-xxxx		yes
2.1	Classification according to Regulation (EC) No 1272/2008 (CLP): This substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.	Classification acc. to GHS: This substance does not meet the criteria for classification.	yes
3.1	REACH Reg. No: 01-2119490224-41-xxxx		yes
8.2	Material thickness: min. 0,11 mm	Material thickness: min. 0,11 mm  min. 0,11 mm	yes
9.1	Appearance		yes
9.1	Other safety parameters		yes
9.1		Lower and upper explosion limit: not determined	yes
9.1	Evaporation rate: not determined		yes
9.1	Explosion limits of dust clouds: not determined		yes
9.1		Decomposition temperature: not relevant	yes
9.1	pH (value): 4.2 – 4.6 (water: 20 g/l, 20 °C)	pH (value): 4.2 – 4.6 (in aqueous solution: 20 g/l, 20 °C)	yes
9.1		Kinematic viscosity: not relevant	yes
9.1	- n-octanol/water (log KOW): this information is not available	Partition coefficient n-octanol/water (log value): not relevant (inorganic)	yes
9.1		Density and/or relative density	yes
9.1	Vapour density: this information is not available		yes
9.1	Viscosity: not relevant (solid matter)		yes
9.1	Explosive properties: none		yes
9.1	Oxidising properties: none		yes
9.1		Relative vapour density: information on this property is not available	yes

**Potassium dihydrogen phosphate for cell biology**

Version number: GHS 2.1  
Replaces version of: 2020-08-28 (GHS 1)

Revision: 2023-11-30

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
9.1		Particle characteristics: no data available	yes
9.2	other information: there is no additional information	Other information	yes
9.2		Information with regard to physical hazard classes: hazard classes acc. to GHS (physical hazards): not relevant	yes
9.2		Other safety characteristics: there is no additional information	yes
11.1	Classification according to GHS (1272/2008/EC, CLP): This substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.	Classification acc. to GHS: This substance does not meet the criteria for classification.	yes
11.2		Information on other hazards: There is no additional information.	yes
12.5	Results of PBT and vPvB assessment: Data are not available.	Results of PBT and vPvB assessment: According to the results of its assessment, this substance is not a PBT or a vPvB.	yes
12.6	Endocrine disrupting potential: Not listed.	Endocrine disrupting properties: Information on this property is not available.	yes
12.7	Other adverse effects	Other adverse effects: Data are not available.	yes
14.4	Packing group: not assigned to a packing group	Packing group: not assigned	yes
14.7	Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN): Not subject to ADR, RID and ADN.		yes
15.1	Restrictions according to REACH, Annex XVII: not listed		yes
15.1	List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list: not listed		yes
15.1		Regulation on persistent organic pollutants (POP): not listed	yes
15.1		National inventories: change in the listing (table)	yes
16		Abbreviations and acronyms: change in the listing (table)	yes
16	Key literature references and sources for data: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU. Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).	Key literature references and sources for data: Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).	yes

**Potassium dihydrogen phosphate for cell biology**

Version number: GHS 2.1  
Replaces version of: 2020-08-28 (GHS 1)

Revision: 2023-11-30

Section	Former entry (text/value)	Actual entry (text/value)	Safety-rel- evant
16	Disclaimer: This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.	Disclaimer: This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product. The information is intended to give you guidelines for the safe handling of the product mentioned in this safety data sheet during storage, processing, transport and disposal. The information is not transferable to other products. Insofar as the product is mixed, blended or processed with other materials or is subjected to processing, the information in this safety data sheet cannot be transferred to the new material produced in this way, unless expressly stated otherwise.	yes

**Abbreviations and acronyms**

Abbr.	Descriptions of used abbreviations
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> )
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit
TWA	Time-weighted average
VOC	Volatile Organic Compounds

## Potassium dihydrogen phosphate for cell biology

Version number: GHS 2.1  
Replaces version of: 2020-08-28 (GHS 1)

Revision: 2023-11-30

Abbr.	Descriptions of used abbreviations
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### Disclaimer

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