

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: Sodium dihydrogen phosphate monohydrate for biochemistry

Article number: 1227

Registration number (REACH): This information is not available.

EC number: 231-449-2

CAS number: 10049-21-5

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

Identified uses:

- laboratory chemical

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier:

neoFroxx GmbH

Marie-Curie-Str. 3

D-64683 Einhausen

info@neofroxx.com

Further information obtainable from:

Dep. Quality Control

1.4. Emergency telephone number

+49 (6251) 989 24 - 0 (during normal business hours)

2. Hazards identification

2.1. Classification of the substance or mixture

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.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP): not required

Signal word: not required

2.3. Other hazards

There is no additional information.

3. Composition / information on ingredients

3.1. Substances

Name of substance Sodium dihydrogen phosphate monohydrate

EC number 231-449-2

CAS number 10049-21-5

Molecular formula $\text{NaH}_2\text{PO}_4 \cdot \text{H}_2\text{O}$

Molar mass 138 g/mol

4. First aid measures

4.1. Description of first aid measures

General notes:

Take off contaminated clothing.

Following inhalation:

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact:

Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

Following eye contact:

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion:

Rinse mouth. Call a doctor if you feel unwell.

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

4.3. Indication of any immediate medical attention and special treatment needed
none

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Co-ordinate fire-fighting measures to the fire surroundings water spray, foam, dry extinguishing powder, carbon dioxide (CO₂)

Unsuitable extinguishing media: water jet

5.2. Special hazards arising from the substance or mixture
Non-combustible.

Hazardous combustion products:

In case of fire may be liberated: phosphorus oxides (P_xO_y)

5.3. Advice for firefighters

Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
For non-emergency personnel: Do not breathe dust.

6.2. Environmental precautions
Keep away from drains, surface and ground water.

6.3. Methods and material for containment and cleaning up

Advices on how to contain a spill: Covering of drains.

Advices on how to clean up a spill: Take up mechanically.

Other information relating to spills and releases: Place in appropriate containers for disposal.

Reference to other sections:

Hazardous combustion products: see section 5.

Personal protective equipment: see section 8.

Incompatible materials: see section 10.

Disposal considerations: see section 13.

7. Handling and storage

7.1. Precautions for safe handling
Avoid dust formation.

Advice on general occupational hygiene: Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities
Keep container tightly closed. Store in a dry place.

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Incompatible substances or mixtures: Observe hints for combined storage.

Consideration of other advice:

Ventilation requirements: Use local and general ventilation.

Specific designs for storage rooms or vessels: Recommended storage temperature: 15 - 25 °C.

- 7.3. Specific end use(s)
No information available.

8. Exposure controls / personal protection

8.1. Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	Notation	Identifier	TWA[mg/m ³]	STEL [mg/m ³]	Source
GB	dust	i	WEL	10		EH40/2005
GB	dust	r	WEL	4		EH40/2005

Notation

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 15minute 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

8.2. Exposure controls

Individual protection measures (personal protective equipment):



Eye/face protection:

Use safety goggle with side protection.

Skin protection:

hand protection:

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.

type of materialNBR (Nitrile rubber)

material thickness>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.

Respiratory protection:

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

Environmental exposure controls:

Keep away from drains, surface and ground water.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	solid (crystalline)
Colour	colourless
Odour	odourless
Odour threshold	No data available

Other physical and chemical parameters

pH (value)	4,1 - 4,5 (50 g/l, 25 °C)
Melting point/freezing point	~ 100 °C
Initial boiling point and boiling range	This information is not available.
Flash point	not applicable
Evaporation rate	no data available
Flammability (solid, gas)	No information available

Explosive limits

lower explosion limit (LEL)	this information is not available
upper explosion limit (UEL)	this information is not available
Explosion limits of dust clouds	these information are not available
Vapour pressure	This information is not available.
Density	2,04 g/cm ³ at 20 °C
Vapour density	This information is not available.
Bulk density	~ 880 kg/m ³
Relative density	Information on this property is not available.

Solubility(ies)

Water solubility	~ 850 g/l at 20 °C
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Partition coefficient

n-octanol/water (log KOW)	This information is not available.
Auto-ignition temperature	Information on this property is not available.
Decomposition temperature	>100 °C
Viscosity	not relevant (solid matter)
Explosive properties	none
Oxidising properties	none

9.2. Other information

There is no additional information.

10. Stability and reactivity

10.1. Reactivity

This material is not reactive under normal ambient conditions.

10.2. Chemical stability

Hygroscopic solid.

10.3. Possibility of hazardous reactions

Violent reaction with: Strong acid

10.4. Conditions to avoid

Keep away from heat. Decomposition takes place from temperatures above: >100 °C. Protect from moisture.

10.5. Incompatible materials
There is no additional information.

10.6. Hazardous decomposition products
Hazardous combustion products: see section 5.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity:

Shall not be classified as acutely toxic.

Exposure route	Endpoint	Value	Species	Source	Notes
oral	LD50	8.290 mg/kg mg	rat	GESTIS	anhydr.
dermal	LD50	7.940 /kg	rabbit	IUCLID	anhydr.

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.

Summary of evaluation of the CMR properties:

Shall not be classified as germ cell mutagenic, carcinogenic nor 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.

Symptoms related to the physical, chemical and toxicological characteristics:

If swallowed: data are not available

If in eyes: slightly irritant

If inhaled:

Inhalation of dust may cause irritation of the respiratory system, cough

If on skin:

Frequently or prolonged contact with skin may cause dermal irritation

Other information:

None

12. Ecological information

12.1. Toxicity

acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.

12.2. Process of degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

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

Data are not available.

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- 12.6. Other adverse effects
Slightly hazardous to water.

13. Disposal considerations

- 13.1. Waste treatment methods
Consult the appropriate local waste disposal expert about waste disposal.
Sewage disposal-relevant information Do not empty into drains.
- 13.2. Relevant provisions relating to waste
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.
- 13.3. Remarks
Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

14. Transport information

- 14.1. UN number
(not subject to transport regulations), not relevant
- 14.2. UN proper shipping name
not relevant
- 14.3. Transport hazard class(es) Class
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- 14.4. Packing group
not relevant
- 14.5. Environmental hazards
none (non-environmentally hazardous acc. to the dangerous goods regulations)
- 14.6. Special precautions for user
There is no additional information.
- 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
The cargo is not intended to be carried in bulk.
- 14.8. Information for each of the UN Model Regulations
Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)
Not subject to ADR, RID and ADN.
International Maritime Dangerous Goods Code (IMDG) Not subject to IMDG.
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15. Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Relevant provisions of the European Union (EU)
Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC): Not listed.
Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS): Not listed.
Regulation 850/2004/EC on persistent organic pollutants (POP): Not listed.
Restrictions according to REACH, Annex XVII: not listed
List of substances subject to authorisation (REACH, Annex XIV): not listed
Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II: not listed

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR): not listed

Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD): not listed

National inventories

Substance is listed in the following national inventories:

EINECS/ELINCS/NLP (Europe)

REACH (Europe)

15.2. Chemical Safety Assessment

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

16. Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
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
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
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
vPvB	very Persistent and very Bioaccumulative
WEL	workplace exposure limit

Key literature references and sources for data

Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU

Regulation (EC) No. 1272/2008 (CLP, EU GHS)

List of relevant phrases (code and full text as stated in chapter 2 and 3) not relevant.

Disclaimer

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.