

# Sodium dihydrogen phosphate dihydrate

## Safety Data Sheet

**S0522**

according to Regulation (EU) 2015/830

Version: 2.0

Date of issue: 22/04/2011    Revision date 09/04/2018  
Supersedes 03/08/2011

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

#### 1.1. Product identifier

Product form : Substance  
Trade name : Sodium dihydrogen phosphate dihydrate  
EC-No. : 231-449-2  
CAS-No. : 13472-35-0  
Product code : S0522  
Formula : NaH<sub>2</sub>PO<sub>4</sub> · 2H<sub>2</sub>O  
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.  
Function or use category : Raw material

##### 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	Product identifier	%
Sodium dihydrogen phosphate dihydrate	(CAS-No.) 13472-35-0 (EC-No.) 231-449-2	> 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 : Assure fresh air breathing.  
First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.  
First-aid measures after eye contact : Rinse with water.  
First-aid measures after ingestion : Drink plenty of water  
If you feel unwell, seek medical advice.

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

No additional information available

### 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

Fire hazard : The product is not flammable. On exposure to high temperature, may decompose, releasing toxic gases. Phosphorus oxides.  
Explosion hazard : Product is not explosive.

### 5.3. Advice for firefighters

Precautionary measures fire : Exercise caution when fighting any chemical fire.  
Firefighting instructions : Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ensure adequate air ventilation. Avoid raising dust.

#### 6.1.2. For emergency responders

Protective equipment : Wear proper protective equipment.

### 6.2. Environmental precautions

Prevent product from entering drains.

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

Methods for cleaning up : Sweep up dry powder and dispose properly. To clean the floor or objects contaminated by this product, use : Water.

### 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  
Keep container tightly closed.

### 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

No additional information available

### 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:

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	: Powder. Crystalline solid.
Molecular mass	: 156,01 g/mol
Colour	: White.
Odour	: odourless.
Odour threshold	: No data available
pH	: 4,2 - 4,5 (5% in H <sub>2</sub> O)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 60 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1,915 20°C
Density	: ca. 1000 kg/m <sup>3</sup>
Solubility	: Soluble in water. Water: 850 g/l
Log Pow	: -3,96
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

No additional information available

## 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

None under normal conditions.

### 10.4. Conditions to avoid

Heat  
High temperature.

**10.5. Incompatible materials**

No additional information available

**10.6. Hazardous decomposition products**

Phosphorus oxides.

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

Acute toxicity : Not classified

Sodium dihydrogen phosphate dihydrate (13472-35-0)	
LD50 oral rat	8290 mg/kg
LD50 dermal rabbit	> 7940 mg/kg

Skin corrosion/irritation : Not classified  
pH: 4,2 - 4,5 (5% in H<sub>2</sub>O)

Serious eye damage/irritation : Not classified  
pH: 4,2 - 4,5 (5% in H<sub>2</sub>O)

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**

Sodium dihydrogen phosphate dihydrate (13472-35-0)	
LC50 fish 1	> 2400 mg/l 48 h, Leuciscus idus

**12.2. Persistence and degradability**

No additional information available

**12.3. Bioaccumulative potential**

Sodium dihydrogen phosphate dihydrate (13472-35-0)	
Log Pow	-3,96

**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**

Waste treatment methods : Avoid release to the environment.  
 Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

**SECTION 14: Transport information**

In accordance with ADR / IATA / IMDG

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

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

Not regulated

**- Transport by sea**

Not regulated

**- Air transport**

Not regulated

**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

Sodium dihydrogen phosphate dihydrate is not on the REACH Candidate List

Sodium dihydrogen phosphate dihydrate is not on the REACH Annex XIV List

**15.1.2. National regulations****Germany**

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according to Regulation (EU) 2015/830

Reference to AwSV : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 1 or 2; ID No. 371)

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 chemical safety assessment has been carried out

## SECTION 16: Other information

Indication of changes:

1.4	Emergency telephone	Modified	Added additional information
8.2	Hand protection	Modified	Specified material, thickness, et cetera of gloves

Abbreviations and acronyms:

SDS	Safety Data Sheet
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

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. Supplier.

SDS Biochemicals version 2018

*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*