

# Sodium dihydrogen phosphate dihydrate

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Date of issue: 17/09/2012 Revision date: 21/03/2017

**256331**

Version: 2.0

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

### 1.1. Product identifier

Product form : Substance  
Substance name : Sodium dihydrogen phosphate dihydrate  
IUPAC name : Sodium dihydrogen phosphate dihydrate  
EC-No. : 231-449-2  
CAS-No. : 13472-35-0  
Product code : 256331  
Formula :  $\text{NaH}_2\text{PO}_4 \cdot 2\text{H}_2\text{O}$   
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 : Pharmaceutical  
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 Farma BV  
A. Hofmanweg 71  
2031BH Haarlem - The Netherlands  
T +31(0)23-5319093  
[farma@ducheffa.nl](mailto:farma@ducheffa.nl) - [www.duchefa-farma.com](http://www.duchefa-farma.com)

### 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)

| Country        | Organisation/Company   | Address                         | Emergency number | Comment |
|----------------|--|---------------------------------|------------------|---------|
| United Kingdom | Guy's & St Thomas' Poisons Unit<br>Medical Toxicology Unit,<br>Centre Hospitalier<br>Universitaire de<br>Constantine | Avonley Road<br>SE14 5ER London | 0870 243 2241    |         |

## 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]

No labelling applicable

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

| Name                                  | Product identifier                         | %          | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---------------------------------------|--|------------|---|
| Sodium dihydrogen phosphate dihydrate | (CAS-No.) 13472-35-0<br>(EC-No.) 231-449-2 | 98 - 100.5 | Not classified  |

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: Fire-fighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : All extinguishing agents can be used.

### 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.

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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)

Pharmaceutical industry.

## 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 g/mol                           |
| Colour  | : White.                              |
| Odour   | : odourless.                          |
| Odour threshold                               | : No data available                   |
| pH  | : 4.2 - 4.5                           |
| pH solution                                   | : 5 % in H <sub>2</sub> O             |
| Relative evaporation rate<br>(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.<br>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.

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### 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

Serious eye damage/irritation : Not classified  
pH: 4.2 - 4.5

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.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

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### SECTION 14: Transport information

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

| ADR                                     | IATA                               |
|---|------------------------------------|
| <b>14.1. UN number</b>                  |                                    |
| Not applicable                          | Not applicable                     |
| <b>14.2. UN proper shipping name</b>    |                                    |
| Not applicable                          | Not applicable                     |
| <b>14.3. Transport hazard class(es)</b> |                                    |
| Not applicable                          | Not applicable                     |
| Not applicable                          | Not applicable                     |
| <b>14.4. Packing group</b>              |                                    |
| Not applicable                          | Not applicable                     |
| <b>14.5. Environmental hazards</b>      |                                    |
| Dangerous for the environment : No      | Dangerous for the environment : No |
| No supplementary information available  |                                    |

#### 14.6. Special precautions for user

##### - Overland transport

No data available

##### - Air transport

No data available

#### 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

No additional information available

#### 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 |
|-----|-------------------|

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|       |   |
|-------|---|
| 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 EU (REACH Annex II) Version 2017

*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*