Sodium Phosphate Dibasic Heptahydrate
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Revision date: 10/12/2018  Supersedes: 7/2/2015  Version: 3.0

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

1.1. Product identifier

Product form : Substance
Name : Disodium Phosphate Heptahydrate
Trade name : Sodium Phosphate Dibasic Heptahydrate
EC-No. : 231-448-7
CAS-No. : 7782-85-6
REACH registration No : 01-2119489797-11-0042
Formula : Na₂HPO₄ • 7H₂O

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

1.2.1. Relevant identified uses
Use of the substance/mixture : Pharmaceutical industry

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer
JOST CHEMICAL CO.
8150 Lackland
P.O. Box MO 63114
Saint Louis - USA
T +1 314-428-4300 - F +1 314-428-4366
sds@jostchemical.com

Distributor
JOST CHEMICAL EUROPE SPRL
Rue du Bois Portal 30/1-3
5300 Andenne - BELGIQUE
T +32 85 552 655 - F +32 85 552 654
info@josteurope.com

1.4. Emergency telephone number

Emergency number : For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
United States and Canada: 1-800-424-9300 / +1 703-527-3887
Global: +1 703-741-5970

<table>
<thead>
<tr>
<th>Country</th>
<th>Organisation/Company</th>
<th>Address</th>
<th>Emergency number</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ireland</td>
<td>National Poisons Information Centre Beaumont Hospital</td>
<td>PO Box 1297 Beaumont Road 9 Dublin</td>
<td>+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)</td>
<td></td>
</tr>
</tbody>
</table>

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
To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Signal word (CLP) : None
Hazard statements (CLP) : None.
Precautionary statements (CLP) : None.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
SECTION 3: Composition/information on ingredients

3.1. Substances

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disodium Phosphate Heptahydrate</td>
<td>(CAS-No.) 7782-85-6 (EC-No.) 231-448-7 (REACH-no) 01-2119489797-11-0042</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: Move the affected person away from the contaminated area and into the fresh air.
First-aid measures after skin contact: Remove all contaminated clothing and footwear. Rinse with plenty of water.
First-aid measures after eye contact: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). If irritation persists, consult an eye specialist.
First-aid measures after ingestion: Give water to drink. If necessary seek medical advice.

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


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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media


5.2. Special hazards arising from the substance or mixture

Fire hazard: Not combustible.
Hazardous decomposition products in case of fire: On thermal decomposition (pyrolysis), releases: Sodium oxides. Phosphorus oxides.

5.3. Advice for firefighters

Firefighting instructions: Cool down the containers exposed to heat with a water spray. Do not dispose of fire-fighting water in the environment.
Protection during firefighting: Do not attempt to take action without suitable protective equipment. Complete protective clothing. Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Do not breathe dust.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: “Exposure controls/personal protection”.

6.2. Environmental precautions

Do not allow product to spread into the environment. Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

For containment: Sweep up or vacuum up the product. Collect up the product and place it in a spare container suitably labelled.
Methods for cleaning up: Wash contaminated area with large amounts of water.
Other information: Dispose of contaminated materials in accordance with current regulations.

6.4. Reference to other sections

For further information refer to section 13.
SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Ensure good ventilation of the work station. Dust extraction (suction). Avoid contact with skin and eyes. Avoid the formation or spread of dust in the atmosphere.

Hygiene measures: Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures: Does not require any specific or particular technical measures.
Storage conditions: Keep container tightly closed and dry. Store in dry, cool, well-ventilated area.
Incompatible materials: Strong oxidizing agents. Strong acids.

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Disodium Phosphate Heptahydrate (7782-85-6)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ireland</td>
<td>Local name</td>
<td>Dusts non-specific</td>
</tr>
<tr>
<td>Ireland</td>
<td>OEL (8 hours ref) (mg/m³)</td>
<td>4 mg/m³ respirable 10 mg/m³ total inhalable</td>
</tr>
<tr>
<td>Ireland</td>
<td>Regulatory reference</td>
<td>Code of Practice for the Chemical Agents Regulations 2018</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disodium Phosphate Heptahydrate (7782-85-6)</th>
<th>DNEL/DMEL (Workers)</th>
<th>DNEL/DMEL (General population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term - systemic effects, inhalation</td>
<td>15.47 mg/m³</td>
<td>6.63 mg/m³</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls:
Ensure good ventilation of the work station. Extraction to remove dust at its source.

Hand protection:
Nitrile-rubber protective gloves. Butyl-rubber protective gloves. Neoprene rubber gloves. Chloroprene protective gloves. VITON gloves. The protective gloves to be used must comply with the specifications of the regulation 2016/425 and the resultant standard EN 374. Breakthrough time: refer to the recommendations of the supplier

Eye protection:
Safety goggles

Respiratory protection:
In case of dust formation use respirator with filter: P1 / FFP1

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Pellet.</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>268.07 g/mol</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless.</td>
</tr>
<tr>
<td>Odour</td>
<td>None.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>450 °C (anhydrous product)</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>&gt; 400 °C (anhydrous product)</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>240 °C</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not flammable</td>
</tr>
</tbody>
</table>
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Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : 1.7
Solubility : Water: 23 - 25 % (anhydrous product - 20°C - pH = 9.2)
Log Pow : Not applicable
Viscosity, kinematic : Not applicable
Viscosity, dynamic : No data available
Explosive properties : Not explosive.
Oxidising properties : Non oxidizing material.
Explosive limits : Not determined

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
To our knowledge, the product does not present any particular risk, under normal conditions of use.

10.2. Chemical stability
Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions
None to our knowledge.

10.4. Conditions to avoid
None to our knowledge.

10.5. Incompatible materials
Strong oxidizing agents. Strong acids.

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Disodium Phosphate Heptahydrate (7782-85-6)

LD50 oral rat : > 2000 mg/kg (OECD 420 method) (anhydrous product)
LD50 dermal rat : > 2000 mg/kg (OECD 402 method) (anhydrous product)
LC50 inhalation rat : > 0.83 mg/l/4h (OECD 403 method) (Results obtained on a similar product)

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
  pH: Not applicable
Additional information : Not irritating to rabbits on cutaneous application
  (equivalent or similar to OECD Guideline 404)
Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
  pH: Not applicable
Additional information : Not irritating to rabbits on ocular application
  (equivalent or similar to OECD Guideline 405)
Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)
Additional information : Did not cause sensitisation
  (OECD 429 method)
  (results obtained by read-across)
  (Published data)
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Additional information : In vitro Mammalian Cell Gene Mutation Test : negative
  (OECD 487 method)
  (read-across)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
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Additional information:
- NOAEL (oral,rat) : > 370 mg/kg/d (results obtained by read-across) (Published data)
- STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)
- Additional information : Dust from this product may cause irritation to the respiratory tract
- STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)
- Aspiration hazard : Not classified (Technical impossibility to obtain the data)

**SECTION 12: Ecological information**

**12.1. Toxicity**
- Acute aquatic toxicity : Not classified (Based on available data, the classification criteria are not met)
- Chronic aquatic toxicity : Not classified (Based on available data, the classification criteria are not met)

**Disodium Phosphate Heptahydrate (7782-85-6)**
- LC50 fish : > 100 mg/l/96h Oncorhynchus mykiss (Rainbow trout)(OECD 203 method)(read-across)
- EC50 Daphnia : > 100 mg/l/48 h (Daphnia magna)(OECD 202 method)(read-across)
- ErC50 (algae) : > 100 mg/l/72 h (Desmodesmus subspicatus)(OECD 201 method)(read-across)
- NOEC chronic algae : > 100 mg/l/72 h (Desmodesmus subspicatus)(OECD 201 method)(read-across)

**12.2. Persistence and degradability**
- Disodium Phosphate Heptahydrate (7782-85-6) : Not applicable (inorganic substance).

**12.3. Bioaccumulative potential**
- Disodium Phosphate Heptahydrate (7782-85-6) : Not applicable

**12.4. Mobility in soil**
No additional information available

**12.5. Results of PBT and vPvB assessment**
- Disodium Phosphate Heptahydrate (7782-85-6)
  - This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
  - This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

**12.6. Other adverse effects**
No additional information available

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**
- Waste treatment methods : Dispose of in accordance with relevant local regulations.
- Product/ Packaging disposal recommendations : Destroy at an authorised site.
- Additional information : The user's attention is drawn to the possible existence of specific European, national or local regulations regarding disposal.

**SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1. UN number</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>Dangerous for the environment : No</td>
<td>Dangerous for the environment : No</td>
</tr>
<tr>
<td></td>
<td>Marine pollutant : No</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

10/12/2018 EN (English)
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14.6. Special precautions for user
- Overland transport
  No data available
- Transport by sea
  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
  Disodium Phosphate Heptahydrate is not on the REACH Candidate List
  Disodium Phosphate Heptahydrate 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:
This sheet was updated (refer to the date at the top of this page). SDS changed sections : 8-9-11-12.

Data sources : REACH registration.
Other information : This product must not be used for other applications that mentioned in §1. Safety data sheet established by : LISAM SERVICES - TELEGIS
  17 rue de la Couture F-60400 Passel

SDS EU (REACH Annex II)
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.