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

1.1. Product identifier

Product form : Substance
Substance name : SODIUM PHOSPHATE DIBASIC
Chemical name : Disodium hydrogenorthophosphate / Disodium hydrogenorthophosphate dihydrate
EC no : 231-448-7
CAS No : 7558-79-4 / 10028-24-7
Formula : Na2HPO4
Synonyms : Sodium phosphate dibasic / Disodium phosphate

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
Saint Louis
MO 63114
USA
T : +1 314-428-4300 / F : +1 314-428-4366

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

1.4. Emergency telephone number

<table>
<thead>
<tr>
<th>Country</th>
<th>Organisation/Company</th>
<th>Address</th>
<th>Emergency number</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITED KINGDOM</td>
<td>National Poisons Information Service</td>
<td>Dudley Road</td>
<td>0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)</td>
</tr>
<tr>
<td></td>
<td>(Birmingham Centre) City Hospital</td>
<td>B18 7QH Birmingham</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

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]
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. Presents no particular risk to the environment, provided the disposal requirements (see section 13) and national or local regulations are complied with. Not expected to be a fire/explosion hazard under normal conditions of use. According to EC criteria, this product is not classified as a hazardous substance.

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

Other hazards not contributing to the classification: None to our knowledge.

SECTION 3: Composition/information on ingredients

3.1. Substance

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Directive 67/548/EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM PHOSPHATE DIBASIC</td>
<td>(CAS No) 7558-79-4 / 10028-24-7 (EC no) 231-448-7</td>
<td>100</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
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<td>100</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Full text of R- and H-phrases: see section 16

3.2. Mixture

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: Toxic gases are released. Sodium oxides. Phosphorus oxides.

5.3. Advice for firefighters

Firefighting instructions: Do not dispose of fire-fighting water in the environment. Cool down the containers exposed to heat with a water spray.

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: Avoid contact with skin and eyes.

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. Gather the product and place it in a spare container that has been suitably labelled.

Methods for cleaning up: Wash contaminated area with large amounts of water.

20/04/2015 EN (English) 2/6
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 a cool, well-ventilated place.
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

SODIUM PHOSPHATE DIBASIC (7558-79-4 / 10028-24-7)

DNEL/DMEL (Workers)
Long-term - systemic effects, inhalation : 4,07 mg/m³

DNEL/DMEL (General population)
Long-term - systemic effects, inhalation : 3,04 mg/m³

PNEC (Water)
PNEC aqua (freshwater) : 0,05 mg/l
PNEC aqua (marine water) : 0,005 mg/l
PNEC aqua (intermittent, freshwater) : 0,5 mg/l
PNEC (STP)
PNEC sewage treatment plant : 50 mg/l

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. The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC 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

Physical state : Solid
Colour : white.
Odour : None.
Odour threshold : No data available
pH : Not applicable
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : 240 °C (Decomposes)
Freezing point : Not applicable
Boiling point : Not applicable
Flash point : Not applicable
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 : 4,9
SODIUM PHOSPHATE DIBASIC

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Solubility : Water: Soluble
Log Pow : -5.8 (Published data)
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : Not explosive.
Oxidising properties : Non oxidizing material according to EC criteria.
Explosive limits : No data available

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.

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

10.3. Possibility of hazardous reactions
No additional information available

10.4. Conditions to avoid
None to our knowledge.

10.5. Incompatible materials
Strong acids. Strong oxidizing agents.

10.6. Hazardous decomposition products
On thermal decomposition (pyrolysis), releases: Sodium oxides, Phosphorus oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met)

<table>
<thead>
<tr>
<th>SODIUM PHOSPHATE DIBASIC (7558-79-4 / 10028-24-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
(Published data)
(pH: Not applicable)

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
(Published data)
(pH: Not applicable)

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)
(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)
Bacterial mutation test: Negative
(Published data)

Carcinogenicity : Not classified (Lack of data)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
NOAEL (oral, rat) : > 410 mg/kg/d
(results obtained by read-across)
(Published data)

Specific target organ toxicity (single exposure) : Dust from this product may cause irritation to the respiratory tract

Specific target organ toxicity (repeated exposure) : Not classified (Lack of data)

Aspiration hazard : Not classified (Not applicable)
SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: Presents no particular risk to the environment, provided the disposal requirements (see section 13) and national or local regulations are complied with.

<table>
<thead>
<tr>
<th>SODIUM PHOSPHATE DIBASIC (7558-79-4 / 10028-24-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish</td>
</tr>
<tr>
<td>467 mg/l/48h Gambusia affinis (Mosquito fish)</td>
</tr>
<tr>
<td>EC50 Daphnia</td>
</tr>
<tr>
<td>1089 mg/l/48h (Daphnia magna)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>SODIUM PHOSPHATE DIBASIC (7558-79-4 / 10028-24-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>SODIUM PHOSPHATE DIBASIC (7558-79-4 / 10028-24-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Pow</td>
</tr>
<tr>
<td>-5.8 (Published data)</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
</tr>
</tbody>
</table>

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: Dispose of in accordance with relevant local regulations.
Waste 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 / RID / IMDG / IATA / ADN

14.1. UN number
Not regulated for transport

14.2. UN proper shipping name
Proper Shipping Name (ADR): Not applicable
Proper Shipping Name (IMDG): Not applicable
Proper Shipping Name (IATA): Not applicable

14.3. Transport hazard class(es)

<table>
<thead>
<tr>
<th>ADR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport hazard class(es) (ADR)</td>
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<table>
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<table>
<thead>
<tr>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport hazard class(es) (IATA)</td>
</tr>
</tbody>
</table>

14.4. Packing group

| Packing group (ADR)                     | Not applicable |
| Packing group (IMDG)                    | Not applicable |
| Packing group (IATA)                    | Not applicable |

14.5. Environmental hazards

| Dangerous for the environment:          | No |
| Marine pollutant:                       | No |
| Other information:                      | 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

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 section(s) : 1.


Other information : This product must not be used for other applications that mentionned in §1. Safety data sheet established by : LISAM SERVICES - TELEGIS 17, Rue de la Couture F-60400 PASSEL Safety Made Easy with www.lisam.com.

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.