SAFETY DATA SHEET

1. Identification

Product identifier: SODIUM PHOSPHATE DIBASIC HEPTAHYDRATE

Other means of identification
   Synonyms: Disodium phosphate heptahydrate, Phosphoric acid, disodium salt, Disodium hydrogen phosphate, 7-hydrate

Product No.: 7393, 3824, 3817, 3816, 3803, 7914, 7896

Recommended use and restriction on use
   Recommended use: Not available.
   Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer
   Company Name: Avantor Performance Materials, Inc.
   Address: 3477 Corporate Parkway, Suite 200
            Center Valley, PA 18034
   Telephone: Customer Service: 855-282-6867
   Fax: Contact Person: Environmental Health & Safety
   e-mail: info@avantormaterials.com

Emergency telephone number:
   24 Hour Emergency: 908-859-2151
   Chemtrec: 800-424-9300

2. Hazard(s) identification

Hazard classification

Health hazards
   Serious eye damage/eye irritation Category 2B

Label elements

   Hazard symbol: No symbol
   Signal word: Warning
   Hazard statement: Causes eye irritation.

Precautionary statement

   Prevention: Wash hands thoroughly after handling.
   Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Other hazards which do not result in GHS classification: None.
3. Composition/information on ingredients

Substances

<table>
<thead>
<tr>
<th>Chemical identity</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM PHOSPHATE DIBASIC HEPTAHYDRATE</td>
<td>7782-85-6</td>
<td>98 - 100%</td>
<td></td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

General information: Get medical advice/attention if you feel unwell. If medical advice is needed, have product container or label at hand.

Ingestion: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

Inhalation: Move to fresh air. Get medical attention if symptoms persist.

Skin contact: Wash skin thoroughly with soap and water. Get medical attention if symptoms occur.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.

Most important symptoms/effects, acute and delayed

Symptoms: Irritating to eyes, respiratory system and skin.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire-fighting measures

General fire hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures
Personal precautions, protective equipment and emergency procedures:
Keep unauthorized personnel away. Keep upwind. Ventilate closed spaces before entering them. Avoid inhalation of dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods and material for containment and cleaning up:
Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.

Notification Procedures:
Inform authorities if large amounts are involved.

Environmental precautions:
Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer.

7. Handling and storage

Precautions for safe handling:
Avoid generation and spreading of dust. Avoid prolonged or repeated breathing of dust. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash thoroughly after handling. See Section 8 of the MSDS for Personal Protective Equipment.

Conditions for safe storage, including any incompatibilities:
Keep container tightly closed. Store in a well-ventilated place.

8. Exposure controls/personal protection

Control parameters
Occupational exposure limits
None of the components have assigned exposure limits.

Appropriate engineering controls
No data available.

Individual protection measures, such as personal protective equipment

General information:
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.

Eye/face protection:
Wear safety glasses with side shields (or goggles). Use tight fitting goggles if dust is generated.

Skin protection
Hand protection:
Chemical resistant gloves

Other:
Wear suitable protective clothing.

Respiratory protection:
During dust-raising work: Dust mask.

Hygiene measures:
Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

9. Physical and chemical properties
Appearance

Physical state: Solid
Form: Granules
Color: White
Odor: Odorless
Odor threshold: No data available.

Melting point/freezing point: No data available.
Initial boiling point and boiling range: No data available.
Flash Point: Not applicable
Evaporation rate: No data available.
Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits
Flammability limit - upper (%): No data available.
Flammability limit - lower (%): No data available.
Explosive limit - upper (%): No data available.
Explosive limit - lower (%): No data available.

Vapor pressure: No data available.
Vapor density: No data available.
Relative density: 1.7 (20 °C)

Solubility(ies)
Solubility in water: Slightly Soluble
Solubility (other): No data available.

Partition coefficient (n-octanol/water): No data available.
Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: No data available.

10. Stability and reactivity

Reactivity: No dangerous reaction known under conditions of normal use.
Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions:
Hazardous polymerization does not occur. The substance is hygroscopic and will absorb water by contact with the moisture in the air.

Conditions to avoid:
Contact with incompatible materials.

Incompatible materials:
Acids.

Hazardous decomposition products:
oxides of phosphorus Sodium oxides

11. Toxicological information

Information on likely routes of exposure

Ingestion: Expected to be a low ingestion hazard.
Inhalation: May cause irritation to the respiratory system.
Skin contact: Causes mild skin irritation.
Eye contact: Causes eye irritation.
Information on toxicological effects

Acute toxicity (list all possible routes of exposure)
- **Oral**
  Product: No data available.
- **Dermal**
  Product: No data available.
- **Inhalation**
  Product: No data available.
- **Repeated dose toxicity**
  Product: No data available.

Skin corrosion/irritation
Product: Causes mild skin irritation.

Serious eye damage/eye irritation
Product: Causes eye irritation.

Respiratory or skin sensitization
Product: Not a skin sensitizer.

Carcinogenicity
Product: This substance has no evidence of carcinogenic properties.

  - **IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**
    No carcinogenic components identified
  - **US. National Toxicology Program (NTP) Report on Carcinogens:**
    No carcinogenic components identified
  - **US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**
    No carcinogenic components identified

Germ cell mutagenicity
- **In vitro**
  Product: No mutagenic components identified
- **In vivo**
  Product: No mutagenic components identified

Reproductive toxicity
Product: No components toxic to reproduction

Specific target organ toxicity - single exposure
Product: None known.

Specific target organ toxicity - repeated exposure
Product: None known.

Aspiration hazard
Product: Not classified

Other effects: None known.
12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic invertebrates
Product: No data available.

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and degradability

Biodegradation
Product: There are no data on the degradability of this product.

BOD/COD ratio
Product: No data available.

Bioaccumulative potential

Bioconcentration factor (BCF)
Product: No data available on bioaccumulation.

Partition coefficient n-octanol / water (log Kow)
Product: No data available.

Mobility in soil: No data available.

Other adverse effects: The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT
Not regulated.

IMDG
Not regulated.

IATA
15. Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):
None present or none present in regulated quantities.

Superfund amendments and reauthorization act of 1986 (SARA)

Hazard categories

- Acute (Immediate)
- Chronic (Delayed)
- Fire
- Reactive
- Pressure Generating

SARA 302 Extremely hazardous substance
None present or none present in regulated quantities.

SARA 304 Emergency release notification
None present or none present in regulated quantities.

SARA 311/312 Hazardous chemical

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<th>Threshold Planning Quantity</th>
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<td>SODIUM PHOSPHATE DIBASIC HEPTAHYDRATE</td>
<td>500 lbs</td>
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SARA 313 (TRI reporting)
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None present or none present in regulated quantities.

US state regulations

US. California Proposition 65
No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act
No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List
No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances
No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK
No ingredient regulated by RI Right-to-Know Law present.
Inventory Status:
- Canada DSL Inventory List: On or in compliance with the inventory
- EU EINECS List: On or in compliance with the inventory
- Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory
- US TSCA Inventory: On or in compliance with the inventory
- Australia AICS: On or in compliance with the inventory
- Japan (ENCS) List: Not in compliance with the inventory.
- China Inv. Existing Chemical Substances: On or in compliance with the inventory
- Canada NDSL Inventory: Not in compliance with the inventory.
- Philippines PICCS: On or in compliance with the inventory
- New Zealand Inventory of Chemicals: On or in compliance with the inventory
- Japan ISHL Listing: Not in compliance with the inventory.
- Japan Pharmacopoeia Listing: Not in compliance with the inventory.

16. Other information, including date of preparation or last revision

NFPA Hazard ID

![NFPA Hazard ID Diagram]

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue date: 05-20-2014
Revision date: No data available.
Version #: 1.0
Further information: No data available.
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