1. PRODUCT AND COMPANY IDENTIFICATION

Product Name  Sodium phosphate dibasic anhydrous
Cat No.  BP332-1; BP332-500; S374-1; S374-3; S374-50; S374-250LB; S374-500; S375-12; S375-100LB; S375-212; S375-250LB; S375-500; S379-12; S379-50; S379-212; S379-250LB; S379-500; S393-3; S393-3LC

Synonyms  Disodium hydrogen phosphate; Monohydrogen sodium phosphate
(Granular/Powder/USP/FCC/EP/Laboratory/Certified ACS)

Recommended Use  Laboratory chemicals

Company  Fisher Scientific
          One Reagent Lane
          Fair Lawn, NJ 07410
          Tel: (201) 796-7100

Emergency Telephone Number  CHEMTREC®, Inside the USA: 800-424-9300
                              CHEMTREC®, Outside the USA: 703-527-3887

CAUTION!

May cause eye, skin, and respiratory tract irritation . The toxicological properties have not been fully investigated. Hygroscopic.

Appearance  White
Physical State  Powder

2. HAZARDS IDENTIFICATION

Target Organs  Kidney

Potential Health Effects

Acute Effects

Principle Routes of Exposure

<table>
<thead>
<tr>
<th>Route</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>May cause irritation</td>
</tr>
<tr>
<td>Skin</td>
<td>May cause irritation. May be harmful in contact with skin.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>May cause irritation of respiratory tract. May be harmful if inhaled.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.</td>
</tr>
</tbody>
</table>
Chronic Effects
May cause adverse kidney effects.
See Section 11 for additional Toxicological information.

Aggravated Medical Conditions
No information available.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Haz/Non-haz</th>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sodium phosphate dibasic</td>
<td>7558-79-4</td>
<td>99</td>
</tr>
</tbody>
</table>

### 4. FIRST AID MEASURES

**Eye Contact**
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**Skin Contact**
Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

**Inhalation**
Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.

**Ingestion**
Do not induce vomiting. Obtain medical attention.

**Notes to Physician**
Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Flash Point**
No information available.

**Method**
No information available.

**Autoignition Temperature**
No information available.

**Explosion Limits**

<table>
<thead>
<tr>
<th>Upper</th>
<th>Lower</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No data available</td>
</tr>
</tbody>
</table>

**Suitable Extinguishing Media**
Substance is nonflammable; use agent most appropriate to extinguish surrounding fire..

**Unsuitable Extinguishing Media**
No information available.

**Hazardous Combustion Products**
No information available.

<table>
<thead>
<tr>
<th>Sensitivity to mechanical impact</th>
<th>Sensitivity to static discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available.</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

**Specific Hazards Arising from the Chemical**
Thermal decomposition can lead to release of irritating gases and vapors.

**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

Environmental Precautions
Should not be released into the environment.

Methods for Containment and Clean Up
Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal.

7. HANDLING AND STORAGE

Handling
Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothing.

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures
Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Guidelines
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

NIOSH IDLH: Immediately Dangerous to Life or Health

Personal Protective Equipment

Eye/face Protection
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

Skin and body protection
Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Powder</td>
</tr>
<tr>
<td>Appearance</td>
<td>White</td>
</tr>
<tr>
<td>odor</td>
<td>odorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available.</td>
</tr>
<tr>
<td>pH</td>
<td>8.7-9.3 (@ 20 ) 5% aq.sol. 20°C</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No information available.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available.</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>&gt; 240°C</td>
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<tr>
<td>Decomposition temperature °C</td>
<td>No information available.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No information available.</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available.</td>
</tr>
</tbody>
</table>
9. PHYSICAL AND CHEMICAL PROPERTIES

Specific Gravity
No information available.

Solubility
Slightly soluble in water

log Pow
No data available

Molecular Weight
141.96

Molecular Formula
H Na2 O4 P

10. STABILITY AND REACTIVITY

Stability
Hygroscopic.

Conditions to Avoid
Incompatible products. Excess heat. Exposure to moist air or water.

Incompatible Materials
Strong oxidizing agents, Strong acids

Hazardous Decomposition Products
Sodium oxides, Oxides of phosphorus

Hazardous Polymerization
Hazardous polymerization does not occur

Hazardous Reactions
None under normal processing.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium phosphate dibasic</td>
<td>17 g/kg ( Rat )</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Irritation
No information available.

Toxicologically Synergistic Products
No information available.

Chronic Toxicity

Carcinogenicity
There are no known carcinogenic chemicals in this product

Sensitization
No information available.

Mutagenic Effects
No information available.

Reproductive Effects
No information available.

Developmental Effects
No information available.

Teratogenicity
No information available.
Other Adverse Effects
The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

Endocrine Disruptor Information
No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity
Do not empty into drains

Persistence and Degradability
No information available

Bioaccumulation/ Accumulation
No information available

Mobility
No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification

14. TRANSPORT INFORMATION

DOT
Not regulated

TDG
Not regulated

IATA
Not regulated

IMDG/IMO
Not regulated

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>NLP</th>
<th>PICCS</th>
<th>ENCS</th>
<th>AICS</th>
<th>CHINA</th>
<th>KECL</th>
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</thead>
<tbody>
<tr>
<td>Sodium phosphate dibasic</td>
<td>X</td>
<td>X</td>
<td></td>
<td>231-448-7</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>KE-12344</td>
<td>X</td>
</tr>
</tbody>
</table>

Legend:
X - Listed
E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
P - Indicates a commenced PMN substance
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable
SARA 313 Not applicable

SARA 311/312 Hazardous Categorization

- Acute Health Hazard No
- Chronic Health Hazard No
- Fire Hazard No
- Sudden Release of Pressure Hazard No
- Reactive Hazard No

Clean Water Act

<table>
<thead>
<tr>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium phosphate dibasic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CWA - Hazardous Substances</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>5000 lb</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Clean Air Act
Not applicable

OSHA
Not applicable

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

<table>
<thead>
<tr>
<th>Component</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA EHS RQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium phosphate dibasic</td>
<td>5000 lb</td>
<td></td>
</tr>
</tbody>
</table>

California Proposition 65
This product does not contain any Proposition 65 chemicals.

State Right-to-Know

<table>
<thead>
<tr>
<th>Component</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
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</thead>
<tbody>
<tr>
<td>Sodium phosphate dibasic</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</tr>
</tbody>
</table>
16. OTHER INFORMATION

Prepared By
Regulatory Affairs
Thermo Fisher Scientific
Tel: (412) 490-8929

Creation Date
02-Feb-2010

Print Date
02-Feb-2010

Revision Summary
"***", and red text indicates revision

Disclaimer
The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS