SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier

Product code: S1395
Product Name: SODIUM PHOSPHATE, MONOBASIC, MONOHYDRATE, CRYSTAL, REAGENT, ACS

Other means of identification

Synonyms: Dihydrogen Sodium Phosphate; Sodium dihydrogen phosphate monohydrate; Sodium Biphosphate monohydrate; sodium dihydrogen orthophosphate monobasic; Sodium Phosphate, Monobasic, Hydrate; Monosodium Phosphate, monohydrate

CAS #: 10049-21-5
RTECS #: Not available
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against: No information available

Supplier: Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: https://www.spectrumchemical.com
Emergency telephone number: Chemtrec 1-800-424-9300
Contact Person: Tom Tyner (USA - West Coast)
Contact Person: Ibad Tirmiz (USA - East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Not classified
### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Phosphate, Monobasic, Monohydrate</td>
<td>10049-21-5</td>
<td>100</td>
</tr>
</tbody>
</table>

### 4. FIRST AID MEASURES

**First aid measures**

**General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops.

**Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention.

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

**Most important symptoms and effects, both acute and delayed**

**Symptoms:**
- May cause eye/skin irritation
- May cause digestive (gastrointestinal) tract irritation
- Vomiting
- Abdominal pain
- May cause diarrhea

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician:** Treat symptomatically.

**Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

### 5. FIRE-FIGHTING MEASURES

**Extinguishing Media**

**Suitable Extinguishing Media:** The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.
Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous combustion products No information available.
Specific hazards No information available.

Special Protective Actions for Firefighters

Specific Methods: No information available
Special Protective Equipment 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, protective equipment and emergency procedures

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

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.
Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions: Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

Safe Handling Advice: Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities


Incompatible Materials:
Acids
Bases

Product code: S1395
Product name: SODIUM PHOSPHATE, MONOBASIC, MONOHYDRATE, CRYSTAL, REAGENT, ACS
8. EXPOSURE CONTROLS/PERSO NFL PROTECTION

Control parameters

National occupational exposure limits

United States

<table>
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<tr>
<th>Component</th>
<th>CAS No</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WEEL</th>
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Canada

<table>
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<tr>
<th>Component</th>
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<th>Canada - Ontario</th>
<th>Canada - Quebec</th>
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Australia and Mexico

<table>
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<th>Australia</th>
<th>Mexico</th>
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<td>10049-21-5</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles or Safety glasses with side-shields.

Skin and body protection: Long sleeved clothing
Chemical resistant apron
Gloves

Respiratory protection: Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product When using, do not eat, drink or smoke.

Product code: S1395
Product name: SODIUM PHOSPHATE, MONOBASIC, MONOHYDRATE, CRYSTAL, REAGENT, ACS
## 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Molecular/Formula weight (g/mole)</td>
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<td>Not applicable</td>
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<td>Odor threshold (ppm)</td>
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<tr>
<td>Miscibility</td>
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<tr>
<td>Solubility</td>
<td>Soluble in Water</td>
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</table>

## 10. STABILITY AND REACTIVITY

### Reactivity
- Reactive with acids
- Reacts with strong bases
- Reactive with oxidizing agents

### Chemical stability
- Stability: Stable under recommended storage conditions.

### Possibility of Hazardous Reactions
- Hazardous polymerization does not occur

### Conditions to avoid

### Incompatible Materials
- Acids
- Bases
- Strong oxidizing agents

### Hazardous decomposition products
- Sodium oxides. Phosphorus oxides.
Corrosivity:  
No information available

Special Remarks on Corrosivity:  
No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:  
Ingestion, Inhalation.

Acute Toxicity

Component Information

<table>
<thead>
<tr>
<th>Sodium Phosphate, Monobasic, Monohydrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS No 10049-21-5</td>
</tr>
<tr>
<td><strong>LD50/oral/rat</strong></td>
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<tr>
<td><strong>LD50/oral/mouse</strong></td>
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<tr>
<td><strong>LD50/dermal/rabbit</strong></td>
</tr>
<tr>
<td><strong>LD50/dermal/rat</strong></td>
</tr>
<tr>
<td><strong>LC50/inhalation/rat</strong></td>
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<tr>
<td><strong>LC50/inhalation/mouse</strong></td>
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<tr>
<td>Other LD50 or LC50 information</td>
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</table>

Product Information

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<tr>
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</thead>
<tbody>
<tr>
<td>LD50/oral/mouse</td>
<td>Value - Acute Tox = No information available</td>
</tr>
<tr>
<td>LD50/dermal/rabbit</td>
<td>Value - Acute Toxicity = No information available</td>
</tr>
<tr>
<td>LD50/dermal/rat</td>
<td>Value - Acute Tox = No information available</td>
</tr>
<tr>
<td>LC50/inhalation/rat</td>
<td>VALUE-Vapor = No information available</td>
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<tr>
<td>LC50/inhalation/mouse</td>
<td>VALUE - Gas = No information available</td>
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<tr>
<td>LC50/inhalation/mouse</td>
<td>VALUE - Dust/Mist = No information available</td>
</tr>
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</table>

Symptoms

<table>
<thead>
<tr>
<th>Skin Contact:</th>
<th>May cause skin irritation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Contact:</td>
<td>May cause eye irritation.</td>
</tr>
</tbody>
</table>

Product code: S1395  
Product name: SODIUM PHOSPHATE, MONOBASIC, MONOHYDRATE, CRYSTAL, REAGENT, ACS
Inhalation  
May cause irritation of respiratory tract.

Ingestion  
It is considered a low hazard for usual industrial handling because phosphates are slowly and incompletely absorbed in the intestinal tract. The most frequently observed effect is gastrointestinal irritation with abdominal pain and cramping, vomiting, diarrhea. If ingestion of large doses occurs and if a significant amount of phosphate is absorbed, severe electrolyte (mineral) disturbances (imbalances) can occur resulting in hyperphosphatemia, hypocalcemia, hyperkalemia, hypernatremia and hypomagnesemia may occur. Symptoms may include anorexia, increased thirst (dehydration), metabolic acidosis, decrease in the amount of urine or in frequency of urination, renal failure, troubled breathing and shortness of breath, tetany/carpopedal spasms, seizures/convulsions, tremor, dizziness, fatigue, lethargy, confusion, changes in mood such as anxiety, depression or irritability, weakness, muscle cramps, numbness or tingling, pain around the mouth or lips, hands or feet, weakness in the hands or feet, bradycardia (slow heartbeat) or tachycardia (fast heartbeat), dysrhythmias (cardiac arrhythmias), hypotension, cardiac arrest, hyperpyrexia.

Aspiration hazard  
No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity  
No information available.

Sensitization:  
No information available.

Mutagenic Effects:  
No information available

Carcinogenic effects:  
Not considered carcinogenic.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>IARC</th>
<th>ACGIH - Carcinogens</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
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<tbody>
<tr>
<td>Sodium Phosphate, Monobasic, Monohydrate</td>
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<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

ACGIH (American Conference of Governmental Industrial Hygienists)
IARC (International Agency for Research on Cancer)
NTP (National Toxicology Program)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity  
No data is available

Reproductive Effects:  
No information available

Developmental Effects:  
No information available

Teratogenic Effects:  
No information available

Specific Target Organ Toxicity

STOT - single exposure  
No information available.

STOT - repeated exposure  
No information available.

Target Organs:  
No information available.

Product code:  S1395  
Product name:  SODIUM PHOSPHATE, MONOBASIC, MONOHYDRATE, CRYSTAL, REAGENT, ACS
12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility in soil No information available

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Phosphate, Monobasic, Monohydrate</td>
<td>10049-21-5</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
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</table>

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Class: No information available
Packing group: No information available
Emergency Response Guide Number: No information available
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: No Information available
Symbol(s): No information available
Description: No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant: No Information available

Product code: S1395
Product name: SODIUM PHOSPHATE, MONOBASIC, MONOHYDRATE, CRYSTAL, REAGENT, ACS
15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>U.S. TSCA</th>
<th>KOREA KECL</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS</th>
<th>China IECSC</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
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</thead>
<tbody>
<tr>
<td>Sodium Phosphate, Monobasic, Monohydrate</td>
<td>10049-21-5</td>
<td>Not listed; Sodium Phosphate, monobasic, monohydrate (CAS no.10049-21-5) is exempt from TSCA</td>
<td>Not present</td>
<td>Present</td>
<td>Not present</td>
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<td>Present</td>
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</tbody>
</table>

Product code: S1395

Product name: SODIUM PHOSPHATE, MONOBASIC, MONOHYDRATE, CRYSTAL, REAGENT, ACS
8(b) Inventory listing since it is a hydrate. However, the anhydrous form (CAS no. 7558-80-7) is listed as ACTIVE on the TSCA 8(b) Inventory.

U.S. Regulations


Chemicals Known to the State of California to Cause Cancer:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
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CERCLA/SARA

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
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U.S. TSCA

<table>
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<tr>
<th>Component</th>
<th>CAS No</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
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</table>

Canada

WHIMIS 2015 - GHS Classifications

WHIMIS 2015 Hazard Classification Information: Not a dangerous product according to HPR classification criteria.

Canada Hazardous Products Regulation: This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR.

Product code: S1395

Product name: SODIUM PHOSPHATE, MONOBASIC, MONOHYDRATE, CRYSTAL, REAGENT, ACS
## DSL/NDSL

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<th>Classification</th>
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<td>CEPA Schedule I - Toxic Substances</td>
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<table>
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<th>CAS No</th>
<th>Classification</th>
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<td>CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting</td>
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**EU Classification**

**EU GHS - SV - CLP 1272/2008**

<table>
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<th>Component</th>
<th>CAS No</th>
<th>Classification</th>
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<td>10049-21-5</td>
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**EU - CLP (1272/2008)**

**R-phrase(s)**

cannot determined (not applicable)

**S-phrase(s)**

none

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<tr>
<th>Component</th>
<th>CAS No</th>
<th>Classification</th>
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<th>Safety Phrases</th>
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</table>

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**

None

**16. OTHER INFORMATION**

| Preparation Date: | 1/9/2015 |
| Revision date:    | 6/14/2018 |
| Prepared by:      | Sonia Owen |

**Disclaimer:**

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be
the user’s responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet