Safety Data Sheet

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Buffer, Reference Standard, pH 6.86 ± 0.01 at 25°C

Product Number: 1540
Other Identifying Product Numbers: 1540-1, 1540-16, 1540-1CT, 1540-2.5, 1540-20, 1540-20F1, 1540-32, 1540-5

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

1.3. Details of the Supplier of the Safety Data Sheet

Company: Ricca Chemical Company

Address: 448 West Fork Drive
Arlington, TX 76012 USA

Telephone: 888-467-4222

1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300
CHEMTREC (International) 1+ 703-527-3887

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)
For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

This product is not categorized as hazardous in any GHS hazard class.

2.2. GHS Label Elements

Pictograms: None required.

Signal Word: None required.

Hazard Statements: None required.

Precautionary Statements: None required.
Safety Data Sheet

2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance or Mixture

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Formula</th>
<th>Molecular Weight</th>
<th>CAS Number</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>H₂O</td>
<td>18.01 g/mol</td>
<td>7732-18-5</td>
<td>99.30%</td>
</tr>
<tr>
<td>Sodium Phosphate Dibasic</td>
<td>Na₂HPO₄</td>
<td>141.95 g/mol</td>
<td>7558-79-4</td>
<td>0.35%</td>
</tr>
<tr>
<td>Potassium Dihydrogen Phosphate</td>
<td>KH₂PO₄</td>
<td>136.08 g/mol</td>
<td>7778-77-0</td>
<td>0.34%</td>
</tr>
<tr>
<td>Proprietary</td>
<td>Proprietary</td>
<td>Data not available.</td>
<td>PP26628-22-8</td>
<td>0.01%</td>
</tr>
</tbody>
</table>

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: May cause slight irritation.

Inhalation: Not expected to require first aid. If necessary, remove to fresh air.

Skin Contact: May cause slight irritation to those allergic to phosphates.

Ingestion: Dilute with water or milk. Call a physician if necessary.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Non-flammable, non-corrosive, non-toxic. Does not present any significant health hazards. May cause irritation. Wash areas of contact with water. EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause slight irritation to those allergic to phosphates.

4.3. Medical Attention or Special Treatment Needed

Not expected to require special treatment.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.
Safety Data Sheet

5.3. Special Protective Equipment for Firefighters
Use protective clothing and breathing equipment appropriate for the surrounding fire.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures
Wear appropriate PPE for the size and nature of the spill. As a general rule, wear safety glasses and gloves.

6.2. Cleanup and Containment Methods and Materials
Absorb with suitable material (vermiculite, clay, etc.) and dispose of in accordance with local regulations. Check with local agencies for the proper disposal of phosphate containing solutions.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions
As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

SECTION 8: Exposure Controls / Personal Protection

8.2. Exposure Controls
Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.
Respiratory Protection: Normal room ventilation is adequate.
Skin Protection: Chemical resistant gloves.
Eye Protection: Safety glasses or goggles.

8.3. Personal Protective Equipment
Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.
Safety Data Sheet

SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

- **Appearance:** Colorless liquid
- **Physical State:** Liquid
- **Odor:** Data not available.
- **Odor Threshold:** Data not available.
- **pH:** 6.86
- **Melting/Freezing Point:** Approximately 0°C
- **Initial Boiling Point /Range:** Approximately 100°C - Approximately 100°C
- **Flash Point:** Data not available.
- **Evaporation Rate:** Data not available.
- **Flammability:** Data not available.
- **Flammability/Explosive Limits:** Data not available.
- **Vapor Pressure:** Data not available.
- **Vapor Density:** Data not available.
- **Relative Density:** 1.0
- **Solubility:** Miscible
- **Partition Coefficient (n-Octanol/Water):** Data not available.
- **Auto-Ignition Temperature:** Data not available.
- **Decomposition Temperature:** Data not available.
- **Viscosity:** Data not available.
- **Explosive Properties:** Data not available.
- **Oxidizing Properties:** Data not available.

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

None identified.

10.4. Hazardous Decomposition Products

Will not occur.
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SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:
Not applicable.

Acute Toxicity - Dermal Exposure:
Not applicable.

Acute Toxicity - Inhalation Exposure:
Not applicable.

Acute Toxicity - Other Information:
LD50, Oral, Rat: (Sodium Phosphate Dibasic) 17 gm/kg; LD50, Dermal, Rabbit: (Potassium Phosphate Monobasic) >4640 mg/kg; details of toxic effects not reported other than lethal dose value.

Skin Corrosion and Irritation:
Not applicable.

Serious Eye Damage and Irritation:
Not applicable.

Respiratory Sensitization:
Not applicable.

Skin Sensitization:
Not applicable.

Germ Cell Mutagenicity:
Not applicable.

Carcinogenicity:
Not applicable.

Reproductive Toxicity:
Not applicable.

Specific Target Organ Toxicity from Single Exposure:
Not applicable.

Specific Target Organ Toxicity from Repeated Exposure:
Not applicable.

Aspiration Hazard:
Not applicable.

Additional Toxicology Information:
Data not available.
Safety Data Sheet

SECTION 12: Ecological Information

12.1. Ecotoxicity
   Not applicable.

12.2. Persistence and Degradability
   Data not available.

12.3. Bioaccumulative Potential
   Data not available.

12.4. Mobility in Soil
   Data not available.

12.5. Other Adverse Ecological Effects
   Data not available.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods
   Data not available.

SECTION 14: Transportation Information

14.1. Transportation by Land - Department of Transportation (DOT, United States of America)

   Not regulated according to DOT Regulations.

SECTION 15: Regulatory Information

15.1. Occupational Safety and Health Administration (OSHA) Hazards
   Not listed.

15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances
   Not listed.
Safety Data Sheet

15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals
Sodium Phosphate Dibasic (CAS # 7558-79-4): 5000 lb final RQ (listed under Sodium phosphate, dibasic); 2270 kg final RQ (listed under Sodium phosphate, dibasic)
Sodium Phosphate Dibasic (CAS # 7558-79-4): 5000 lb final RQ; 2270 kg final RQ

15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)
Not listed.

15.5. Massachusetts Right-to-Know Substance List
Sodium Phosphate Dibasic (CAS # 7558-79-4): Present

15.6. Pennsylvania Right-to-Know Hazardous Substances
Sodium Phosphate Dibasic (CAS # 7558-79-4): Environmental hazard
Sodium Phosphate Dibasic (CAS # 7558-79-4): Present
Water (CAS # 7732-18-5): Present

15.7. New Jersey Worker and Community Right-to-Know Components
Sodium Phosphate Dibasic (CAS # 7558-79-4): sn 1723

15.8. California Proposition 65
Not listed.

15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)
Sodium Phosphate Dibasic (CAS # 7558-79-4): Present
Water (CAS # 7732-18-5): Present
Potassium Dihydrogen Phosphate (CAS # 7778-77-0): Present

15.10. United States of America Toxic Substances Control Act (TSCA) List
Sodium Phosphate Dibasic (CAS # 7558-79-4): Present
Water (CAS # 7732-18-5): Present
Potassium Dihydrogen Phosphate (CAS # 7778-77-0): Present

15.11. European Inventory of Existing Commercial Chemical Substances (EINECS),
European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)
Not listed.

SECTION 16: Other Information

16.1. Full Text of Hazard Statements and Precautionary Statements
Safety Data Sheet

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.
Health Hazards Not Otherwise Classified (HHNOC): Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health: 1
Flammability: 0
Reactivity: 0
Special Hazard:

16.4. Document Revision

Last Revision Date: 5/1/2015

DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.