Safety Data Sheet

SECTION 1: Identification

1.1. Product Identifier

 Trade Name or Designation: Buffer, Reference Standard, pH 11.00 ± 0.01 at 25°C

 Product Number: 1610
 Other Identifying Product Numbers: 1610-1, 1610-16, 1610-1CT, 1610-2.5, 1610-32, 1610-5, 1610-8

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.

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Category</th>
<th>Hazard Statement</th>
<th>Precautionary Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Damage / Irritation</td>
<td>Category 2A</td>
<td>H319</td>
<td>P264, P280, P305+P351+P338, P337+P313</td>
</tr>
</tbody>
</table>

2.2. GHS Label Elements

 Pictograms:

⚠️

Signal Word: Warning
Safety Data Sheet

Hazard Statements:

<table>
<thead>
<tr>
<th>Hazard Number</th>
<th>Hazard Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

Precautionary Statements:

<table>
<thead>
<tr>
<th>Precautionary Number</th>
<th>Precautionary Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>P264</td>
<td>Wash arms, hands and face thoroughly after handling.</td>
</tr>
<tr>
<td>P280</td>
<td>Wear protective gloves and eye protection.</td>
</tr>
<tr>
<td>P305+P351+P338</td>
<td>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
</tr>
<tr>
<td>P337+P313</td>
<td>If eye irritation persists: Get medical attention.</td>
</tr>
</tbody>
</table>

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>98.88%</td>
</tr>
<tr>
<td>Sodium Phosphate Dibasic</td>
<td>Na₃HPO₄</td>
<td>141.95 g/mol</td>
<td>7558-79-4</td>
<td>1.07%</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>NaOH</td>
<td>39.99 g/mol</td>
<td>1310-73-2</td>
<td>0.06%</td>
</tr>
</tbody>
</table>

SECTION 4: First-Aid Measures

4.1. General First Aid Information

**Eye Contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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

Does not present any significant health hazards. May cause irritation to those allergic to phosphates. Wash areas of contact with water. EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause slight irritation to those allergic to phosphates.
Safety Data Sheet

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.

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 protective gloves and eye protection.

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

8.1. Control Parameters

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Limit Type</th>
<th>Country</th>
<th>Exposure Limit</th>
<th>Information Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide (1310-73-2)</td>
<td>TWA</td>
<td>USA</td>
<td>2 mg/m³ TWA</td>
<td>U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)</td>
</tr>
<tr>
<td>Sodium Hydroxide (1310-73-2)</td>
<td>TLV-Ceiling</td>
<td>USA</td>
<td>2 mg/m³ Ceiling</td>
<td>ACGIH - Threshold Limit Values - Ceilings (TLV-C)</td>
</tr>
</tbody>
</table>

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: Wear protective gloves and eye protection. Chemical resistant gloves.

   Eye Protection: Wear protective gloves and eye protection. Safety glasses or goggles.
Safety Data Sheet

8.3. Personal Protective Equipment
Wear protective gloves and eye protection. Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.

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: 11
Melting/Freezing Point: 0.0°C
Initial Boiling Point /Range: 100°C - 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.

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; details of toxic effects not reported other than lethal dose value.

Skin Corrosion and Irritation:
Not applicable.

Serious Eye Damage and Irritation:
Causes serious eye irritation. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. 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 attention.

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.

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 Hydroxide (CAS # 1310-73-2): 1000 lb final RQ; 454 kg final RQ
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 Hydroxide (CAS # 1310-73-2): Present
Sodium Phosphate Dibasic (CAS # 7558-79-4): Present

15.6. Pennsylvania Right-to-Know Hazardous Substances
Sodium Hydroxide (CAS # 1310-73-2): Environmental hazard
Sodium Hydroxide (CAS # 1310-73-2): Present
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 Hydroxide (CAS # 1310-73-2): corrosive
Sodium Hydroxide (CAS # 1310-73-2): sn 1706
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 Hydroxide (CAS # 1310-73-2): Present
Sodium Phosphate Dibasic (CAS # 7558-79-4): Present
Water (CAS # 7732-18-5): Present

15.10. United States of America Toxic Substances Control Act (TSCA) List
Sodium Hydroxide (CAS # 1310-73-2): Present
Sodium Phosphate Dibasic (CAS # 7558-79-4): Present
Water (CAS # 7732-18-5): 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.
16.1. Full Text of Hazard Statements and Precautionary Statements

Causes serious eye irritation.

Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection.

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 attention.

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.