Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Catalog Number:
1610, B-398, B017950, BX-1017, SB017950

Product Identity:
BUFFER, REFERENCE STANDARD, pH 11.0 - 11.5

Manufacturer's Name:
RICCA CHEMICAL COMPANY LLC

Emergency Contact(24 hr) -- CHEMTREC®
Domestic: 800-424-9300
International: 703-527-3887

CAGE Code: 4TCW6, 0V553, 4XZQ2

Address:
448 West Fork Dr
Arlington, TX 76012

Telephone Number For Information:
817-461-5601

Date Prepared:
8/10/99

Revision: 5

Last Revised: 09/28/2011
Date Printed: 10/03/2011 10:30:08 am

Section 2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Registry #</th>
<th>Concentration</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>&lt; 1% (w/v)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C 2 mg/m3</td>
<td>2 mg/m3</td>
</tr>
<tr>
<td>Sodium Phosphate, Dibasic</td>
<td>7558-79-4</td>
<td>0.5 - 1.1% (w/v)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Water, Deionized</td>
<td>7732-18-5</td>
<td>Balance</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Section 3: Hazard Identification

Emergency Overview: Does not present any significant health hazards. May cause irritation to those allergic to phosphates. Wash areas of contact with water.

Target Organs: eyes, skin

Eye Contact: May cause slight irritation.

Inhalation: May cause allergic respiratory reaction to those allergic to phosphates.

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

Ingestion: Ingestion of large quantity may cause stomach upset.

Chronic Effects/Carcinogenicity: None

IARC - No.
NTP - No.
OSHA - No.
Section 4: First Aid Measures - In all cases, seek qualified evaluation.

Eye Contact: Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops.
Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.
Skin Contact: Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops.
Ingestion: Dilute with water or milk. Call a physician if necessary.

Section 5: Fire Fighting Measures

LFL: Not Available.  UFL: Not Available.
Extinguishing Media: Use any means suitable for extinguishing surrounding fire.
Fire & Explosion Hazards: Not considered to be a fire or explosion hazard.
Fire Fighting Instructions: Use normal procedures/instructions.
Fire Fighting Equipment: Use protective clothing and breathing equipment appropriate for the surrounding fire.

Section 6: Accidental Release Measures

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

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

Safety Storage Code: General

Section 8: Exposure Control/Personal Protection

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.

Section 9: Physical and Chemical Properties

Appearance: Clear, colorless liquid
Odor: Odorless
Solubility in Water: Infinite
Specific Gravity: Approximately 1

pH: 11 - 11.5
Boiling Point(°C): Approximately 100
Melting Point(°C): Approximately 0
Vapor Pressure: Not Applicable.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.
Incompatibility: None identified.
Hazardous Decomposition Products: Phosphorus oxides may form when heated to decomposition.
Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information

LD50, Oral, Rat: (Sodium Phosphate Dibasic) 17 gm/kg; details of toxic effects not reported other than lethal dose value.
Section 12. Ecological Information

Ecotoxicological Information: No information found.
Chemical Fate Information: No information found.

Section 13. Disposal Considerations

Dilute with water and flush to sewer if regulations allow for the flushing of phosphate containing solutions. If not allowed, save for recovery or recycling in an approved waste disposal facility. Always dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information

Part Numbers:

This product is not regulated.

Section 15. Regulatory Information (Not meant to be all inclusive - selected regulation represented)

OSHA Status: The above items either do not contain any specifically hazardous material or the potentially hazardous material is present in such low concentration that the items do not present any immediate threat to health and safety. These items do not meet the OSHA Hazard Communication Standard (29 CFR 1910.1200) definition of a hazardous material.

TSCA Status: All components of this solution are listed on the TSCA Inventory or are mixtures (hydrates) of items listed on the TSCA Inventory.

Sara Title III:
- Section 302 Extremely Hazardous Substances: Not Applicable.
- Section 311/312 Hazardous Catagories: No
- Section 313 Toxic Chemicals: Not Applicable.

California: None Reported.

Pennsylvania: Sodium Hydroxide is listed as an Environmental Hazard on the state’s Hazardous Substances List. Sodium Phosphate, Dibasic is listed as an Environmental Hazard on the state’s Hazardous Substances List. Sodium Hydroxide is listed as an Environmental Hazard on the state’s Hazardous Substances List. Sodium Phosphate, Dibasic is listed as an Environmental Hazard on the state’s Hazardous Substances List.

RCRA Status: Not Applicable.

CERCLA Reportable Quantity: Sodium Hydroxide - 1,000 pounds. Sodium Phosphate, Dibasic - 5,000 pounds. Sodium Hydroxide - 1,000 pounds. Sodium Phosphate, Dibasic - 5,000 pounds.

WHMIS: Not Applicable.

Section 16. Other Information

NFPA Ratings:
- Health: 1
- Flammability: 0
- Reactivity: 0
- Special Notice Key: None

HMIS Ratings:
- Health: 1
- Flammability: 0
- Reactivity: 0
- Protective Equipment: B (Protective Eyewear, Gloves)

Rev 1, 6-26-2000: Reformatted from WordPerfect® to Microsoft Word®; (Section 1) revised emergency telephone number to CHEMTREC® 800-424-9300; (Section 11) added toxicological information on Sodium Phosphate; (Section 15) added Pennsylvania listing.
Rev 2, 10-09-2001: Reformatted to electronic data format.
Rev 3, 07-31-2003: (Section 1) added Solutions Plus catalog number B017950.
Rev 4, 10-09-2006: (Section 1) added pH range to title, added Red Bird catalog number BX-1017; (Section 2) revised concentration range of Sodium Phosphate; (Section 9) revised pH from 11.
Rev 5, 09-28-2011: Reviewed and approved for distribution.
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.