Section 1. Chemical Product and Company Identification

Catalog Number(s)
00654-00, 05942-21, 05942-22, 05942-24, 05942-25, 05942-26, 05942-27, 35653-01, 35654-00

Product Identity
BUFFER, Standard, pH 4.01; BUFFER, High Accuracy, pH 4.000 (Color Coded Red)

Manufacturer’s Name
RICCA CHEMICAL COMPANY

Address (Number, Street, City, State, and ZIP Code)
P.O. Box 13090
Arlington, Texas 76094

Emergency Telephone Number (24 hr)
CHEMTREC®: 800-424-9300

Telephone Number For Information
817-461-5601

Date Prepared
3-7-2000

Section 2. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Registry #</th>
<th>Percent Concentration</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Acid Phthalate</td>
<td>877-24-7</td>
<td>0.95 – 1.05</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Preservative*</td>
<td>proprietary</td>
<td>&lt;0.5</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>*(No Mercury compounds or Formaldehyde)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inert Dye</td>
<td>proprietary</td>
<td>&lt;0.1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Water, Deionized</td>
<td>7732-18-5</td>
<td>Balance</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Section 3. Hazards Identification

EMERGENCY OVERVIEW
Non-flammable, non-toxic, non-corrosive. Does not present any significant health hazards. Wash areas of contact with water.

POTENTIAL HEALTH EFFECTS:
TARGET ORGANS: eyes, skin.

EYE CONTACT: May cause slight irritation.

INHALATION: Not likely to be hazardous by inhalation.

SKIN CONTACT: May cause slight irritation.

INGESTION: Large doses may cause nausea, vomiting, diarrhea and cramps.

CHRONIC EFFECTS / CARCINOGENICITY:
IARC – No
NTP – No
OSHA – No

TERATOLOGY (BIRTH DEFECT) INFORMATION:
No information found in “Registry of Toxic Effects of Chemical Substances” or other information sources.

REPRODUCTION INFORMATION:
No information found in “Registry of Toxic Effects of Chemical Substances” or other information sources.
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

**FLAMMABLE PROPERTIES:**

- **FLASH POINT:** N/A
- **METHOD USED:** N/A
- **FLAMMABLE LIMITS**
  - **LFL:** N/A
  - **UFL:** N/A

**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 and dispose of in accordance with local regulations.

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 Controls / 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

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>APPEARANCE:</strong></td>
<td>Clear, red colored liquid</td>
</tr>
<tr>
<td><strong>ODOR:</strong></td>
<td>odorless</td>
</tr>
<tr>
<td><strong>SOLUBILITY IN WATER:</strong></td>
<td>infinite</td>
</tr>
<tr>
<td><strong>SPECIFIC GRAVITY:</strong></td>
<td>approximately 1</td>
</tr>
<tr>
<td><strong>pH:</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>BOILING POINT (°C):</strong></td>
<td>approximately 100</td>
</tr>
<tr>
<td><strong>MELTING POINT (°C):</strong></td>
<td>approximately 0</td>
</tr>
<tr>
<td><strong>VAPOR PRESSURE:</strong></td>
<td>N/A</td>
</tr>
</tbody>
</table>

Section 10. Stability and Reactivity

**CHEMICAL STABILITY:** Stable under normal conditions of use and storage.

**INCOMPATIBILITY:** Nitric Acid
HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of Carbon and Potassium.

HAZARDOUS POLYMERIZATION: Will not occur.

Section 11. Toxicological Information
LD50, Oral, Rat: >3200 mg/kg (Potassium Phthalate), 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, neutralize with weak sodium hydroxide solution, and then flush to sewer if local regulations allow. 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 (Not meant to be all inclusive)
D.O.T. SHIPPING NAME: Not regulated
D.O.T. HAZARD CLASS: None
U.N. / N.A. NUMBER: None
PACKING GROUP: None
D.O.T. LABEL: None

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.
CERCLA REPORTABLE QUANTITY: Not reportable
SARA TITLE III:
SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: No
SECTION 311/312 HAZARDOUS CATEGORIES: No
SECTION 313 TOXIC CHEMICALS: No
RCRA STATUS: No

CALIFORNIA PROPOSITION 65: Not listed

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, 10-16-2000: (Section 1) added catalog number 35653-01.
Rev 2, 03-25-2003: Reviewed and approved.
Rev 3, 03-20-2006: Reviewed and approved.

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.