**** MATERIAL SAFETY DATA SHEET ****

Buffer Solution pH 7
41136

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Buffer Solution pH 7
Catalog Numbers: A2938950006, AC295050010, 579929-1, NC57949737, SB108 1, SB108 10, SB108 20, SB108 500, SB1081, SB10810, SB10820, SB108500, AXXSB10078L
Synonyms: None
Company Identification: Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410
For information, call: 201-929-7100
Emergency Number: 201-796-7100
For CHEMTREC assistance, call: 800-424-9300
For International CHEMTREC assistance, call: 703-527-3887

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>%</th>
<th>EINECS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>1310-73-2</td>
<td>Sodium hydroxide</td>
<td>1.0</td>
<td>215-185-5</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>99.0</td>
<td>231-791-2</td>
</tr>
<tr>
<td>7778-77-0</td>
<td>Potassium phosphate monobasic</td>
<td>1.0</td>
<td>231-793-4</td>
</tr>
</tbody>
</table>

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW
Appearance: clear, colorless.
Caution: This is expected to be a low hazard for usual industrial handling. May cause irritation. Target Organs: None.

Potential Health Effects
Skin: May cause skin irritation. May cause skin irritation. Low hazard for usual industrial handling.
Ingestion: May cause irritation of the digestive tract.
Inhalation: May cause respiratory tract irritation. Low hazard for usual industrial handling.
Skin: May cause eye irritation.

**** SECTION 4 - FIRST AID MEASURES ****

Skin: Get medical aid if irritation develops or persists. Wash clothing before reuse. Flush skin with plenty of soap and water.
Ingestion: If victim is conscious and alert, give 2-4 cups of milk or water. Get medical aid if irritation or symptoms occur.
Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. Get medical aid if cough or other symptoms appear.

Notes to Physician:
Treat symptomatically and
Antidote: None reported.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information: As any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Substance is noncombustible.
Extinguishing Media: Substance is non-combustible; use agent most appropriate to extinguish surrounding fire.
Autoignition Temperature: Not available.
Flash Point: Not available.
NFPA Rating: Not published.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks:
Absorb spill with inert material, e.g., dry sand or earth, then place into a chemical waste container. Clean up spills immediately. Notice precautions in the Protective Equipment section. Provide ventilation.

**** SECTION 7 - HANDLING AND STORAGE ****

Handling:
Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.
Storage:
Store in a cool, dry place. Keep containers tightly closed.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:
Good general ventilation should be sufficient to control airborne levels.

Exposure Limits

| Chemical Name | ACGIH | TLV
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>0 mg/m3</td>
<td>0 mg/m3</td>
</tr>
<tr>
<td>Water</td>
<td>none listed</td>
<td>none listed</td>
</tr>
<tr>
<td>Potassium phosphate</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs:
Sodium hydroxide: No OSHA Vacated PELs are listed for this chemical.
Water: No OSHA Vacated PELs are listed for this chemical.
Potassium phosphate: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate protective clothing to minimize contact with skin.
Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State: Liquid
Appearance: clear, colorless
Odor: None reported
Vapor Pressure: 14 mm Hg @20°C
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: 100 deg C
Freezing/Freezing Point: 0 deg C
Decomposition Temperature: Not available
Solubility: soluble
Specific Gravity/Density: Not available
Molar Formula: Not available
Molecular Weight: Not available.

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Conditions to Avoid:
None reported.

Incompatibilities with Other Materials:
There is no information for any incompatibilities for this substance.

Hazardous Decomposition Products:
None.

Hazardous Polymerization: Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS:
CAS# 7732-18-5: WB4000000
CAS# 7732-18-5: ZCD1200000
CAS# 7778-77-0: unlisted.

LD50/LC50:
CAS# 7732-18-5: Oral, rat: LD50 = 96 mL/kg.
CAS# 7778-77-0: unlisted.

Carcinogenicity:
Sodium hydroxide -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Water -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Potassium phosphate monobasic -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology:
No information available.

Teratogenicity:
No information available.

Reproductive Effects:
No information available.

Neurotoxicity:
No information available.

Mutagenicity:
No information available.

Other:
No data available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:
No information available.

Environmental Fate:
No information reported.

Physical/Chemical:
No information available.

Other:
None.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Disposal of in a manner consistent with federal, state, and local regulations.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT:
No information available.

IMO:
Not regulated as a hazardous material.

IAT:
Not regulated as a hazardous material.

RID/ADR:
Not regulated as a hazardous material.

Canadian TDQ:
No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL:
TSCA
CAS# 1310-73-2 is listed on the TSCA inventory.
CAS# 7732-18-5 is listed on the TSCA inventory.
CAS# 7778-77-0 is listed on the TSCA inventory.

Health & Safety Reporting List:
None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules:
None of the chemicals in this product are under a Chemical Test Rule.

Section 120:
None of the chemicals are listed under TSCA Section 120.

TSCA Significant New Use Rule:
None of the chemicals in this material have a SNUR under TSCA.

SARA:
Section 302 (RO):
CAS# 1310-73-2: final RO = 1000 pounds (454 kg)
Section 302 (TPQ):
None of the chemicals in this product have a TPQ.

SARA Codes:
CAS# 1310-73-2: acute, reactive.