Material Safety Data Sheet
Buffer Solution pH 7

ACC# 41136

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Buffer Solution pH 7  
**Catalog Numbers:** AC258590000, AC258590010, S79929-1, MAR77108116, NC9574937, NC9619327, NC9813034, SB1081, SB10810, SB10820, SB108500, XXSB10910LI  
**Synonyms:** None  
**Company Identification:**  
Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410  
**For information, call:** 201-796-7100  
**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>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1310-73-2</td>
<td>Sodium hydroxide</td>
<td>&lt;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>&lt;1.0</td>
<td>231-913-4</td>
</tr>
</tbody>
</table>

**Hazard Symbols:** None listed.  
**Risk Phrases:** None listed.

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

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

**Potential Health Effects**  
**Eye:** May cause eye irritation.  
**Skin:** 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.  
**Chronic:** None

Section 4 - First Aid Measures
**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**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 cupfuls 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 supportively.

**Antidote:** None reported.

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**Section 5 - Fire Fighting Measures**

**General Information:** As in 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 noncombustible; use agent most appropriate to extinguish surrounding fire.

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**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. vermiculite, sand or earth), then place in suitable container. Clean-up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

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**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.

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**Section 8 - Exposure Controls, Personal Protection**

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

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>≤ 2 mg/m³</td>
<td>10 mg/m³ IDI H</td>
<td>2 mg/m³ TWA</td>
</tr>
<tr>
<td>Water</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
<tr>
<td>Potassium phosphate monobasic</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>
OSHA Vacated PELs: Sodium hydroxide: C 2 mg/m3 Water: No OSHA Vacated PELs are listed for this chemical. Potassium phosphate monobasic: 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 gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 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

pH: Not available.

Vapor Pressure: 14 mm Hg @20C

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 100 deg C

Freezing/Melting Point: 0 deg C

Autoignition Temperature: Not available.

Flash Point: Not available.

Decomposition Temperature: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Reactivity: 0

Explosion Limits, Lower: N/A

Upper: N/A

Solubility: soluble

Specific Gravity/Density: Not available.

Molecular Formula: Not available.

Molecular Weight: Not available.

Section 10 - Stability and Reactivity

Chemical Stability: Stable.

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# 1310-73-2: WB4900000

https://fscimage.fishersci.com/msds/41136.htm 5/9/02
CAS# 7732-18-5: ZC0110000
CAS# 7778-77-0: TC6615500

LD50/LC50:
CAS# 1310-73-2:
Draize test, rabbit, eye: 400 ug Mild;
Draize test, rabbit, eye: 1% Severe;
Draize test, rabbit, eye: 50 ug/24H Severe;
Draize test, rabbit, eye: 1 mg/24H Severe;
Draize test, rabbit, skin: 500 mg/24H Severe;
CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg;
CAS# 7778-77-0:
Skin, rabbit: LD50 = >4640 mg/kg;

Carcinogenicity:
CAS# 1310-73-2: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. CAS# 7732-18-5: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. CAS# 7778-77-0: 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 Studies: No data available.

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.

Environmental: No information reported.

Physical: No information available.

Other: None.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.
RCRA U-Series: None listed.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>Shipping Name:</th>
<th>US DOT</th>
<th>IATA</th>
<th>RID/ADR</th>
<th>IMO</th>
<th>Canada TDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No information available.</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td></td>
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<tr>
<td>UN Number:</td>
<td></td>
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</tbody>
</table>
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 12b
None of the chemicals are listed under TSCA Section 12b.

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

SARA

Section 302 (RQ)
CAS# 1310-73-2: final RQ = 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. CAS # 7778-77-0: acute.

Section 313
No chemicals are reportable under Section 313.

Clean Air Act:
This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:
CAS# 1310-73-2 is listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.

STATE
CAS# 1310-73-2 can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
CAS# 7778-77-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols:
Not available.
Risk Phrases:

Safety Phrases:
S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)
CAS# 1310-73-2: 1
CAS# 7732-18-5: No information available.
CAS# 7778-77-0: 1

Canada
CAS# 1310-73-2 is listed on Canada's DSL List. CAS# 1310-73-2 is listed on Canada's DSL List.
CAS# 7732-18-5 is listed on Canada's DSL List. CAS# 7732-18-5 is listed on Canada's DSL List.
CAS# 7778-77-0 is listed on Canada's DSL List. CAS# 7778-77-0 is listed on Canada's DSL List.

This product has a WHMIS classification of Not controlled.
CAS# 1310-73-2 is listed on Canada's Ingredient Disclosure List.
CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.
CAS# 7778-77-0 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits
CAS# 1310-73-2: OEL-AUSTRALIA:TWA 2 mg/m3 OEL-BELGIUM:STEL 2 mg/m3 OEL-DENMARK:TWA 2 mg/m3 OEL-FINLAND:TWA 2 mg/m3 OEL-FRANCE:TWA 2 mg/m3 OEL-GERMANY:TWA 2 mg/m3 OEL-JAPAN:STEL 2 mg/m3 OEL-THE NETHERLANDS:TWA 2 mg/m3 OEL-THE PHILIPPINES:TWA 2 mg/m3 OEL-SWEDEN:TWA 2 mg/m3 OEL-SWITZERLAND:TWA 2 mg/m3; STEL 4 mg/m3 OEL-THAILAND:TWA 2 mg/m3 OEL-TURKEY:TWA 2 mg/m3 OEL-UNITED KINGDOM:TWA 2 mg/m3; STEL 2 mg/m3 OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

Section 16 - Additional Information

MSDS Creation Date: 11/30/1998
Revision #2 Date: 8/02/2000
The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, however arising, even if Fisher has been advised of the possibility of such damages.