Section 1: Chemical Product and Company Identification
Cat#: 25094F
Part Name: 3% SODIUM HYDROXIDE
Supplier: Polysciences, Inc.
400 Valley Road
Warrington, PA 18976 USA
MSDS Telephone #215-343-6484 Emergency only #215-378-4526

Section 2: Hazards Identification
Hazard Overview
Causes skin, eye and respiratory tract burns.

GHS Classification
Serious Eye Cat 1C, Skin Corrosion Cat 1C, Acute Inhalation Cat 4, Eye Irritation Cat 2B

Signal word: Danger

Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Item#</th>
<th>Name</th>
<th>EINECS</th>
<th>CAS#</th>
<th>% in product</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sodium hydroxide</td>
<td>215-185-5</td>
<td>0001310732</td>
<td>0 - 5</td>
</tr>
<tr>
<td>2</td>
<td>Water</td>
<td>231-791-2</td>
<td>0007732185</td>
<td>91 - 100</td>
</tr>
</tbody>
</table>

Section 4: First Aid Measures
Contact medical personnel immediately.
Flush eyes with flowing water for at least 15 minutes.
If breathing is difficult, contact emergency personnel.
If swallowed, wash out mouth with water if person is conscious.
Remove contaminated clothing.
Remove to fresh air.
Separate eyelids with finger tips.
Wash skin with deluge of water for at least 15 minutes.

Section 5: Fire Fighting Measures

Page 1 of 3
Section 6: Accidental Release Measures

Any information listed below is to be considered in addition to internal guidelines for isolation of spill, containment of spill, removal of ignition sources from immediate area, and collection for disposal of spill by trained, properly protected clean up personnel.

Absorb liquids on absorbent material.
Contain spilled liquids.
Protect personnel from exposure.
Ventilate the area.

Section 7: Handling and Storage

Store at room temp.

Section 8: Exposure Controls/ Personal Protection

OSHA (ACGIH) Exposure Limits

<table>
<thead>
<tr>
<th>CAS#: 0001310732</th>
<th>IDLH: 10 mg/m3</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA</td>
<td>Not classifi 2</td>
</tr>
<tr>
<td>ACGIH</td>
<td>-- --</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS#: 0007732185</th>
<th>IDLH: NE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA</td>
<td>NE NE NE NE</td>
</tr>
<tr>
<td>ACGIH</td>
<td>NE NE NE NE</td>
</tr>
</tbody>
</table>

The use of eye protection in the form of safety glasses with side shields and the use of skin protection for hands in the form of gloves are considered minimum and non-discretionary in work places and laboratories. Any recommended personal protection equipment or environmental equipment is to be considered as additional to safety glasses and gloves.

Use chemical splash goggles and face shield.

Chemical-resistant gloves should be worn whenever this material is handled. The glove material has to be impermeable and resistant to the product. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water. All glove recommendations presume that the risk of exposure is through splash and not intentional immersion of the hands into the product. Since glove permeation data does not exist for this material, no recommendation for the glove material can be given for the product. Permeation data must be obtained from the glove manufacturer to determine if the glove is suitable for the task.

Section 9: Physical and Chemical Properties

Formula: NaOH in water
Formula Weight: 40.00
boiling point: 144 C @ 760 mm Hg
melting point: 12 C
solubility: 100%

vapor pressure: 13 mm Hg @ 60 C
vapor density: no data
Specific gravity: 1.53
ph: >14.0

appearance: clear liquid with no distinct odor

Section 10: Stability and Reactivity

Chemical Stabilit: stable
Conditions to Avoid: nap
Incompatibility with other materials: aluminum, air, acids, metals, organic halogen compounds and organic nitro compounds
Hazardous Decomposition Products: prolonged contact with aluminum may produce flammable hydrogen gas.
Hazardous Polymerization: will not occur

Section 11: Toxicological Information

Acute Data: no data
Subchronic data: no data

Section 12: Ecological Information

This material is believed to be slightly toxic to aquatic life.

Section 13: Disposal Considerations

The following chart lists the status of the chemical and its components in reference to 40 CFR Part 261.33. If the product is listed by code number the substance may be subject to special federal and state disposal regulations. If no codes are listed the material must be disposed in compliance with all Federal, State and Local Regulations.
Section 14: Transportation Data

Proper Shipping Name: SODIUM HYDROXIDE SOLUTION
Chemical Name:
UN: UN1824
Class: 8
PG: II

Section 15: Regulatory Information

All components of this product are on the TSCA public inventory.

Prop 65 - Column A identifies those items which are known to the State of California to cause cancer. Column B identifies items which are known to the State of California to cause reproductive toxicity.

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001310732</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>0007732185</td>
<td>no</td>
<td>no</td>
</tr>
</tbody>
</table>

State Regulatory Information: If a CAS# is listed below this material is subject to the listed state right-to-know requirements.

<table>
<thead>
<tr>
<th>CAS#</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0001310732</td>
<td>not listed</td>
</tr>
<tr>
<td>0007732185</td>
<td>not listed</td>
</tr>
</tbody>
</table>

SARA Toxic Release Chemicals (as defined in Section 313 of SARA Title III)
This list identifies the toxic chemicals, including their de minimis concentrations for which reporting is required under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA). The list is also referred to as the Toxics Release Inventory (TRI) List.

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Regulated name</th>
<th>de minimis conc. %</th>
<th>Rep. Thres.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001310732</td>
<td>not listed</td>
<td>not listed</td>
<td>not listed</td>
</tr>
<tr>
<td>0007732185</td>
<td>not listed</td>
<td>not listed</td>
<td>not listed</td>
</tr>
</tbody>
</table>

SARA Extremely Hazardous Substances and TPQs
This list includes hazardous chemicals as defined in 29 CFR 1910.1200(c); and extremely hazardous substances regulated under Section 302 of SARA Title III with their TPQs (in pounds), as listed in 40 CFR 355, Appendices A and B.

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Regulated name</th>
<th>TPQ (pounds)</th>
<th>EHS-RQ (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001310732</td>
<td>not listed</td>
<td>not listed</td>
<td>not listed</td>
</tr>
<tr>
<td>0007732185</td>
<td>not listed</td>
<td>not listed</td>
<td>not listed</td>
</tr>
</tbody>
</table>

CERCLA
The hazardous substances, and their reportable quantities (RQs) are listed in the federal regulations at 40 CFR Part 302, Table 302.4. Release of a CERCLA hazardous substance in an amount equal to or greater than its RQ, in any 24-hour period, must be reported to the National Response Center at (800) 424-8802.

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Regulated name</th>
<th>RQ (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001310732</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>0001310732</td>
<td>Sodium hydroxide</td>
<td>1,000</td>
</tr>
<tr>
<td>0007732185</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Section 16: Other Information

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END OF MSDS