EFFECTS OF ACUTE EXPOSURE TO PRODUCT
Causes severe eye burns. Causes severe skin burns and may cause deep penetrating skin ulcers. If ingested will cause gastrointestinal burns with severe pain, nausea, vomiting, diarrhea and shock. Causes severe irritation of upper respiratory tract with coughing, burns and breathing difficulty.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT
Prolonged or repeated skin contact will cause dermatitis and possible ulcerations.

SKIN CONTACT
Wash exposed skin thoroughly with soap and water for 15 minutes. Seek medical advice immediately.

EYE CONTACT
Flush eyes with water for 15 minutes. Seek medical advice immediately.

INGESTION
DO NOT induce vomiting. Give 2-4 cups of milk or water. Seek medical attention immediately.

INHALATION
If inhaled, remove to fresh air immediately. Seek medical attention.

SECTION 2 - Product and Hazardous Ingredients Information

<table>
<thead>
<tr>
<th>HAZARDOUS INGREDIENTS</th>
<th>CAS NUMBER</th>
<th>W/W %</th>
<th>Permissible Exposure Limit</th>
<th>LD50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>80-90</td>
<td>not listed</td>
<td>42.6 gm/kg</td>
<td>not available</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>9-15</td>
<td>OSHA TWA 2 mg/m3</td>
<td>140 mg/kg</td>
<td>not available</td>
</tr>
</tbody>
</table>

SECTION 3 - Hazards Identification

EFFECTS OF ACUTE EXPOSURE TO PRODUCT
Causes severe eye burns. Causes severe skin burns and may cause deep penetrating skin ulcers. If ingested will cause gastrointestinal burns with severe pain, nausea, vomiting, diarrhea and shock. Causes severe irritation of upper respiratory tract with coughing, burns and breathing difficulty.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT
Prolonged or repeated skin contact will cause dermatitis and possible ulcerations.

SECTION 4 - First Aid Measures

SKIN CONTACT
Wash exposed skin thoroughly with soap and water for 15 minutes. Seek medical advice immediately.

EYE CONTACT
Flush eyes with water for 15 minutes. Seek medical advice immediately.

INGESTION
DO NOT induce vomiting. Give 2-4 cups of milk or water. Seek medical attention immediately.

INHALATION
If inhaled, remove to fresh air immediately. Seek medical attention.

SECTION 5 - Fire Fighting Measures

MEANS OF EXTINCTION
As needed to extinguish adjacent fire source. Do not use direct water stream.

SECTION 6 - Accidental Release

Pick up bottles or other containers and place in drums or other suitable containers. Neutralize with sodium sesquicarbonate. Absorb the residue with dry absorbent material. Flush to sewer with plenty of water, if permitted. Consult with governmental regulatory agencies for appropriate disposal of this material. Wear appropriate protective equipment.

SECTION 7 - Handling and Storage

Read and follow the label, material safety data sheet, and instructions before using. Avoid any contact with skin and eyes. Keep container tightly closed. Avoid incompatible substances. Wash thoroughly after handling this product. Neutralize with sodium bicarbonate.
SECTION 8 - Exposure Controls

VENTILATION  Good general ventilation.
SKIN  Latex or nitrile  EYE  Splash goggles  RESPIRATORY  NIOSH approved
OTHER  Eye wash station

SECTION 9 - Physical and Chemical Properties

PHYSICAL STATE  Liquid  ODOR AND APPEARANCE  Clear colorless odorless liquid
VAPOUR PRESSURE (mmHg)  < 17 mm Hg  VAPOUR DENSITY (Air = 1)  0.6 mm Hg
SPECIFIC GRAVITY  1.100  SOLUBILITY IN WATER (20°C)  Complete
pH  12.0  COEFF WATER OIL  Not available
FREEZING POINT (°C)  ≤ 32°F  PERCENT VOLATILE (BY VOLUME)  85%

SECTION 10 - Stability and Reactivity Data

CHEMICAL STABILITY  YES  NO  IF NO, UNDER WHAT CONDITIONS
INCOMPATIBILITY WITH OTHER SUBSTANCES  YES  NO  IF YES, WHICH ONES?
REACTIVITY, AND UNDER WHAT CONDITIONS  Stable under ambient pressure and temperature.
HAZARDOUS DECOMPOSITION PRODUCTS  Toxic fumes of sodium oxide & sodium peroxide

SECTION 11 - Toxicological Information

EXPOSURE LIMITS  Sodium hydroxide
SODIUM 2mg/M3 PEL TLV
IRRITANCY OF PRODUCT  Eye: Corrosive  Skin: Corrosive
SENSITIZATION TO PRODUCT  Yes
TERATOGENICITY  Not known
REPRODUCTIVE TOXICITY  Not known
MUTAGENICITY  Not known
CARCINOGENICITY  Not listed by IARC, OSHA or ACGIH.
SYNERGISTIC PRODUCTS  Not listed

SECTION 12 - Ecological Information

No data available

SECTION 13 - Disposal Considerations

Dispose of this product in accordance with federal, state and/or local laws.

SECTION 14 - Transportation Information

Sodium hydroxide Solution "Limited Quantity", Class 8, UN 1824, PG II

SECTION 15 - Regulatory Information

SARA: RQ for sodium hydroxide is 1000 lb
SARA Section 304, CERCLA Hazardous components
SARA Section 302,304,313 Hazardous components (None)
Class E under Canadian WHMIS regulations.

SECTION 16 - Other Information

The information contained in this MSDS is furnished without warranty of any kind. The user should consider this data a supplement to other data gathered and must make an independent determination of suitability from this and other sources to assure proper use and disposal of this material and the health and safety of employees and customers.