SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier

Product code: S-854
Product Name: SODIUM HYDROXIDE, 1.00 N SOLUTION, cGMP Grade

Other means of identification

Synonyms: No information available
CAS #: Mixture
RTECS #: Not available
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against: No information available

Supplier: Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA  90248
(310) 516-8000.

Order Online At: https://www.spectrumchemical.com
Emergency telephone number: Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

<table>
<thead>
<tr>
<th>Skin corrosion/iritation</th>
<th>Category 1 Sub-category B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Label elements

Danger

Hazard statements
Causes severe skin burns and eye damage
Hazards not otherwise classified (HNOC)
Not Applicable

Other hazards
Not available

Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>96.16</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>3.84</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

Skin Contact: Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician immediately.

Eye Contact: Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial ventilation.

Product code: S-854
Product name: SODIUM HYDROXIDE, 1.00 N SOLUTION, cGMP Grade
respiration. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. Call a physician immediately.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If victim is conscious, give water or milk. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**
Severe skin and eye irritation or burns. Causes digestive (gastrointestinal) tract irritation. May cause gastrointestinal (digestive) tract burns. May cause abdominal pain, nausea, vomiting, diarrhea.

**Indication of any immediate medical attention and special treatment needed**
Notes to Physician: Treat symptomatically.

**Protection of first-aiders**
First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

## 5. FIRE-FIGHTING MEASURES

**Extinguishing Media**
**Suitable Extinguishing Media:** The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

**Unsuitable Extinguishing Media:** No information available.

**Specific hazards arising from the chemical**

**Hazardous Combustion Products:** No information available.

**Specific hazards:** No information available.

**Special Protective Actions for Firefighters**

**Specific Methods:** No information available.

**Special Protective Equipment for Firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**Product code:** S-854

**Product name:** SODIUM HYDROXIDE, 1.00 N SOLUTION, cGMP Grade
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment: Stop leak if you can do it without risk.

Methods for cleaning up: Neutralize the residue with a dilute solution of acetic acid. Dilute with water. Absorb spill with inert material (e.g. vermiculite, dry sand or earth), then place in a suitable chemical waste container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions: Use only in area provided with appropriate exhaust ventilation. Keep away from incompatible materials.

Safe Handling Advice: Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapors or spray mist. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions: Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store in a segregated and approved area. Store away from incompatible materials.

Incompatible Materials:
- Oxidizing agents
- Reducing agents
- Acids
- Bases
- Aldehydes
- Metals
- Powdered metals

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

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<th>Components</th>
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<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
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<td>None</td>
<td>None</td>
<td>None</td>
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<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>2 mg/m³ TWA</td>
<td>2 mg/m³ Ceiling</td>
<td>2 mg/m³ Ceiling</td>
<td>None</td>
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</tbody>
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Product code: S-854

Product name: SODIUM HYDROXIDE, 1.00 N SOLUTION, cGMP Grade
Canada

<table>
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<th>Components</th>
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<th>Canada - Quebec</th>
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Australia and Mexico

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<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>None</td>
<td>2 mg/m³ Ceiling</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Face-shield
Skin and body protection: Chemical resistant protective suit
Gloves
Boots
Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
Hygiene measures: Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

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<td>Odor: Odorless.</td>
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<tr>
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<td>Autoignition Temperature (°C/°F): No information available</td>
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<tr>
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<td>Decomposition temperature(°C/°F): No information available</td>
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<td>Boiling point/range(°C/°F): No information available</td>
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<td>Density (g/cm³): No information available</td>
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<tr>
<td>Specific gravity: 1.04</td>
<td>pH: No information available</td>
<td>Vapor pressure @ 20°C (kPa): No information available</td>
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</tbody>
</table>

Product code: S-854
Product name: SODIUM HYDROXIDE, 1.00 N SOLUTION, cGMP Grade
Reactivity
For Sodium Hydroxide:
Sodium hydroxide + zinc metal dust causes ignition of the latter.
Under proper conditions of temperature, pressure and state of division, it can ignite or react violently with acetaldehyde, allyl alcohol, allyl chloride, benzene-1,4-diol, chlorine trifluoride, 1,2 dichlorethylene, nitroethane, nitromethane, nitroparaffins, nitropropane, cinnamaldehyde, 2,2-dichloro-3,3-dimethylbutane.
Phosphorous boiled with NaOH yields mixed phosphines which may ignite spontaneously in air.
Sodium hydroxide and cinnamaldehyde + heat may cause ignition.
Reaction with certain metals releases flammable and explosive hydrogen gas.
Generates considerable heat when a sodium hydroxide solution is mixed with an acid. Sodium hydroxide solution and octanol + diborane during a work-up of a reaction mixture of oxime and diborane in tetrahydrofuran is very exothermic, a mild explosion being noted on one occasion. Reactive with water, acids (mineral, non-oxidizing, e.g. hydrochloric, hydrofluoric acid, muriatic acid, phosphoric), acids (mineral, oxidizing e.g. chromic acid, hypochlorous acid, sulfuric acid), acids (organic e.g. acetic acid, benzoic acid, formic acid, methanoic acid, oxalic acid), aldehydes (e.g. acetaldehyde, acrolein, chloral hydrate, formaldehyde), carbamates (e.g. carbamic acid, carbobutanate), esters (e.g. butyl acetate, ethyl acetate, propyl formate), halogenated organics (dibromomethane, hexachlorobenzene, methyl chloride, trichloroethylene), isocyanates (e.g. methyl isocyanate), ketones (acetone, acetonophenone, MEK, MIBK), acid chlorides, strong bases, strong oxidizing agents, strong reducing agents, flammable liquids, powdered metals and metals (i.e. aluminum, tin, zine, hafnium, raney nickel), metals (alkali and alkaline e.g. cesium, potassium, sodium), metal compounds (toxic e.g. beryllium, lead acetate, nickel carbonyl, tetraethyl lead), nitriles (e.g. potassium nitride, sodium nitride), nitriles (e.g. acetonitrile, methyl cyanide), nitro compounds (organic e.g. nitrobenzene, nitromethane), acetic anhydride, hydroquinone, chlorohydrin, chlorosulfonic acid, ethylene cyanohydrin, glyoxal, hydrosulfuric acid, oleum, propiolactone, acetonitrile, phorosous pentoxide, chloroform-methanol, tetrahydroborate, cyanogen azide, 1,2,4,5 tetrachlorobenzene, cinnamaldehyde. Reacts with formaldehyde hydroxide to yield formaldehyde, and hydrogen.
Sodium hydroxide reacts to form explosive products with ammonia + silver nitrate.
Benzene extract of allyl benzenesulfonate prepared from allyl alcohol, and benzene sulfonyl chloride in presence of aqueous sodium hydroxide, under vacuum distillation, residue darkened and exploded.
Sodium Hydroxide + impure tetrahydrofuran, which can contain peroxides, can cause serious explosions.
Sodium Hydroxide reacts with sodium salt of trichlorophenol + methyl alcohol + trichlorobenzene + heat to cause an explosion.

Chemical stability
Stability: Stable under recommended storage conditions.
Possibility of Hazardous Reactions: Hazardous polymerization does not occur
Conditions to avoid: Incompatible materials.
Incompatible Materials: Oxidizing agents Reducing agents Acids Bases Aldehydes Metals Powdered metals
Hazardous decomposition products: No information available.
Other Information
Corrosivity: No information available

Special Remarks on Corrosivity: Very caustic to aluminum and other metals in the presence of moisture

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Skin. Inhalation. Ingestion.

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (dermal) 35162 mg/kg

Component Information

Water

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7732-18-5</td>
<td></td>
</tr>
</tbody>
</table>

LD50/oral/rat = > 90 mL/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Sodium Hydroxide

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1310-73-2</td>
<td></td>
</tr>
</tbody>
</table>

LD50/oral/rat = No information available
LD50/oral/mouse = No information available
LD50/dermal/rabbit = 1350 mg/kg Dermal LD50 Rabbit
LD50/dermal/rat = = 1350 mg/kg Dermal LD50
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = 500 mg/kg Oral LDL (Lowest Lethal Dose) Rabbit

Product Information

LD50/oral/rat = VALUE- Acute Tox Oral = No information available

LD50/oral/mouse = VALUE - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat
VALUE - Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available

Product code: S-854 Product name: SODIUM HYDROXIDE, 1.00 N SOLUTION, cGMP Grade
Value-Dust/Mist = No information available

LC50/Inhalation/mouse VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

**Symptoms**

**Skin Contact:** Severe skin irritation. Causes skin burns. May cause deep penetrating ulcers of the skin.

**Eye Contact:** Severe eye irritation. Causes eye burns. May cause corneal damage.

**Inhalation** Severely irritating to the upper respiratory tract. May cause chemical burns to the respiratory tract. It may cause pulmonary edema. May cause chemical pneumonitis.

**Ingestion** Causes severe gastrointestinal tract irritation and burns. Causes severe pain, nausea, vomiting, diarrhea, and shock. May cause severe and permanent damage to the digestive tract. May cause perforation of the digestive tract. May cause corrosion and permanent destruction of the esophagus.

**Aspiration hazard** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Chronic Toxicity** No information available.

**Sensitization:** No information available.

**Mutagenic Effects:** No information available

**Carcinogenic effects:** Not considered carcinogenic.

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>IARC Not listed</th>
<th>ACGIH - Carcinogens Not listed</th>
<th>NTP Not listed</th>
<th>OSHA HCS - Carcinogens Not listed</th>
<th>Australia - Notifiable Carcinogenic Substances Not listed</th>
<th>Australia - Prohibited Carcinogenic Substances Not listed</th>
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</thead>
<tbody>
<tr>
<td>Water</td>
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</table>

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*IARC (International Agency for Research on Cancer)*

*NTP (National Toxicology Program)*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

**Reproductive toxicity** No data is available

**Reproductive Effects:** No information available

**Developmental Effects:** No information available

**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Product code:** S-854

**Product name:** SODIUM HYDROXIDE, 1.00 N SOLUTION, cGMP Grade
Target Organs: Skin. Eyes. Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

*Sodium Hydroxide - 1310-73-2*

Freshwater Fish Species Data: 45.4 mg/L LC50 Oncorhynchus mykiss 96 h static 1
Water Flea Data: 40.4 mg/L EC50 Ceriodaphnia sp. 48h

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products: Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging: Empty containers should be taken for local recycling, recovery or waste disposal

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
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<td>None</td>
<td>None</td>
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<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>None</td>
<td>None</td>
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</tbody>
</table>

14. TRANSPORT INFORMATION

DOT

UN-No: UN1824
Proper Shipping Name: Sodium hydroxide solution
Hazard Class: 8
Subsidiary Class: No information available
Packing group: II
Emergency Response Guide Number: No information available
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: No Information available
Symbol(s): [DOT]: (R4) - Identifies a material that is a hazardous substance that has a reportable quantity (RQ) of 1000 pounds (454 Kilograms).
Description: UN1824,Sodium hydroxide solution ,8.,PG II

TDG (Canada)

UN-No: UN1824
Proper Shipping Name: Sodium hydroxide solution
Hazard Class: 8
Subsidiary Risk: No information available

Product code: S-854
Product name: SODIUM HYDROXIDE, 1.00 N SOLUTION, cGMP Grade
15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>U.S. TSCA</th>
<th>KOREA KECL</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
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</table>

Product code: S-854  
Product name: SODIUM HYDROXIDE, 1.00 N SOLUTION, cGMP Grade
U.S. Regulations

Sodium Hydroxide

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 1706
New Jersey - Discharge Prevention - List of Hazardous Substances: Present
Pennsylvania RTK: Environmental hazard
Pennsylvania RTK - Environmental Hazard List: Present
Minnesota - Hazardous Substance List: Present
New York Release Reporting - List of Hazardous Substances:
1000 lb RQ
100 lb RQ
Louisiana Reportable Quantity List for Pollutants: 1000lbfinal RQ
454kgfinal RQ
California Directors List of Hazardous Substances: Present

FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 184.1763
FDA - Direct Food Additives 21 CFR 173.310
FDA - 21 CFR - Total Food Additives
155.191, 155.194, 163.110, 163.111, 163.112, 172.560, 172.814, 172.892, 173.310,
176.170, 176.180, 176.210, 177.1600, 177.2800, 184.1763, 73.85


Chemicals Known to the State of California to Cause Cancer:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

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CERCLA/SARA

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<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
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U.S. TSCA

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<th>TSCA 8(d) - Health and Safety Reporting</th>
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</table>

Canada

WHIMIS 2015 - GHS Classifications

WHIMIS 2015 Hazard Classification Information:

Component
Water
7732-18-5 (96.16)

Product code: S-854

Product name: SODIUM HYDROXIDE, 1.00 N SOLUTION, cGMP Grade
Sodium Hydroxide
1310-73-2 (3.84)

Corrosive to Metals - Category 1: H290 May be corrosive to metals. (potentially corrosive to metals; the supplier should be contacted for more information); Health Hazard Not Otherwise Classified - Category 1: Causes severe damage to the respiratory tract; Skin corrosion/irritation - Category 1: H314 Causes severe skin burns and eye damage.; Skin corrosion/irritation - Category 2: H315 Causes skin irritation. (0.4% in aqueous solution); Serious Eye Damage/Eye Irritation - Category 1: H318 Causes serious eye damage.; Serious Eye Damage/Eye Irritation - Category 2: H319 Causes serious eye irritation. (0.4% in aqueous solution); Specific target organ toxicity - Single exposure - Category 3: H335 May cause respiratory irritation. (0.4% in aqueous solution)

Canada Hazardous Products Regulation
This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

WHMIS 1988 Hazard Class
E Corrosive material

Components
Water
Uncontrolled product according to WHMIS classification criteria
Sodium Hydroxide
E including 0.04% in aqueous solution, 0.04N, 0.08%, 0.4% in aqueous solution, 2%, 2.5%, 4% in aqueous solution, 5%, 10%, 16%, 20%, 40%, 50% in aqueous solution, 8.7N

Canada Controlled Products Regulation:
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components
Sodium Hydroxide 1%

Inventory

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>Present</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>Present</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>CEPA Schedule I - Toxic Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>Not listed</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>Not listed</td>
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</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting</th>
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</thead>
<tbody>
<tr>
<td>Water</td>
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<td>Not listed</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

EU Classification

EU GHS - SV - CLP 172/2008

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>EU GHS - SV - CLP (172/2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td></td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>Skin corrosion/irritation - Skin Corr. 1A: H314 Causes severe skin burns and eye damage. (C &gt;= 5%); Skin corrosion/irritation - Skin Corr. 1B: H314 Causes severe skin burns and eye damage. (2% &lt;= C &lt; 5%); Skin</td>
</tr>
</tbody>
</table>

Product code: S-854
Product name: SODIUM HYDROXIDE, 1.00 N SOLUTION, cGMP Grade
corrosion/irritation - Skin Irrit. 2: H315 Causes skin irritation. (0.5 % <= C <2 %); Serious Eye Damage/Eye Irritation - Eye Irrit. 2: H319 Causes serious eye irritation. (0.5 % <= C <2 %))011-002-00-6

EU - CLP (1272/2008)

**R-phrase(s)**
R34 - Causes burns.

**S-phrase(s)**
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 1/2 - Keep locked up and out of the reach of children.
S37/39 - Wear suitable gloves and eye/face protection.

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
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</thead>
<tbody>
<tr>
<td>Water</td>
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<td></td>
<td>No information</td>
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</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>C; R35</td>
<td>5%&lt;=C; R35</td>
<td>2%&lt;=C&lt;5% C; R34</td>
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<tr>
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<td>0.5%&lt;=C&lt;2%</td>
<td>Xi; R36/38</td>
</tr>
</tbody>
</table>

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**
C - Corrosive.

**C**

16. OTHER INFORMATION

**Preparation Date:** 6/27/2016
**Revision Date:** 7/26/2016
**Prepared by:** Sonia Owen

**Disclaimer:**
All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal

**Product code:** S-854  **Product name:** SODIUM HYDROXIDE, 1.00 N SOLUTION, cGMP Grade
protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet