Sodium hydroxide, 50% solution, Membrane and Diaphragm Grade

Safety Data Sheet


Revision Date: 06/24/19  Date of Issue: 03/30/2017  Version: 3.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture
Product Name: Sodium hydroxide, 50% solution, Membrane and Diaphragm Grade
Synonyms: Caustic Soda

Intended Use of the Product

Neutralization of acids, pH control, gas scrubbing, catalyst. Used in manufacture of pulp and paper, petroleum and natural gas, soap and detergents and cellulosics. Also used in water treatment, food processing, mining and metal processing.

Name, Address, and Telephone of the Responsible Party

Manufacturer
CHEMTRADE LOGISTICS INC.
155 Gordon Baker Road
Suite 300
Toronto, Ontario M2H 3N5
For SDS Info: (416) 496-5856
www.chemtradelogistics.com

Emergency Telephone Number

Emergency Number

Canada/US: CHEMTREC +1-800-424-9300
INTERNATIONAL: +1-703-741-5970
Chemtrade Emergency Contact: (866) 416-4404
For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification

Met. Corr.  1 H290
Skin Corr.  1A H314
Eye Dam.  1 H318
Aquatic Acute 3 H402

Full text of hazard classes and H-statements: see section 16

Label Elements

GHS Labeling
Hazard Pictograms

Signal Word

Danger

Hazard Statements

H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.
H402 - Harmful to aquatic life.

Precautionary Statements

P234 - Keep only in original container.
P260 - Do not breathe vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, and eye protection.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor.
P321 - Specific treatment (see section 4 on this SDS).
P363 - Wash contaminated clothing before reuse.
P390 - Absorb spillage to prevent material damage.
P405 - Store locked up.
P406 - Store in corrosive resistant container with a resistant inner liner.
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Other Hazards
Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

Unknown acute toxicity
No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>%*</th>
<th>GHS Ingredient Classification</th>
</tr>
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<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>(CAS-No.) 1310-73-2</td>
<td>48 - 52</td>
<td>Met. Corr. 1, H290</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Corr. 1A, H314</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Dam. 1, H318</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Acute 3, H402</td>
</tr>
<tr>
<td>Water</td>
<td>(CAS-No.) 7732-18-5</td>
<td>48 - 52</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

SECTION 4: FIRST AID MEASURES

Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Immediately flush skin with plenty of water for at least 60 minutes. Get immediate medical advice/attention. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

Most Important Symptoms and Effects Both Acute and Delayed

General: Corrosive to eyes, respiratory system and skin.

Inhalation: May be corrosive to the respiratory tract.

Skin Contact: Causes severe irritation which will progress to chemical burns.

Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide.
Sodium hydroxide, 50% solution, Membrane and Diaphragm Grade

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Unsuitable Extinguishing Media: Halogenated compounds. Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Special Hazards Arising From the Substance or Mixture**

- **Fire Hazard:** Not flammable.
- **Explosion Hazard:** Product is not explosive.
- **Reactivity:** May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

**Advice for Firefighters**

- **Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.
- **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.
- **Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.
- **Hazardous Combustion Products:** Sodium oxides.
- **Other Information:** Do not allow run-off from fire fighting to enter drains or water courses.

**Reference to Other Sections**

Refer to Section 9 for flammability properties.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures**

- **General Measures:** Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

For Non-Emergency Personnel

- **Protective Equipment:** Use appropriate personal protective equipment (PPE).
- **Emergency Procedures:** Evacuate unnecessary personnel.

For Emergency Personnel

- **Protective Equipment:** Equip cleanup crew with proper protection.
- **Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

**Environmental Precautions**

Prevent entry to sewers and public waters. Avoid release to the environment.

**Methods and Materials for Containment and Cleaning Up**

- **For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Absorb spillage to prevent material damage. Cautiously neutralize spilled liquid. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

**Reference to Other Sections**

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

**SECTION 7: HANDLING AND STORAGE**

**Precautions for Safe Handling**

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle empty containers with care because they may still present a hazard. Do not get in eyes, on skin, or on clothing. Do not breathe vapors, mist, or spray.

**Additional Hazards When Processed:** May be corrosive to metals. May release corrosive vapors.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures.

**Conditions for Safe Storage, Including Any Incompatibilities**

- **Technical Measures:** Comply with applicable regulations.
- **Storage Conditions:** Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from extremely high or low temperatures and incompatible materials. Store in original container or corrosive resistant and/or lined container.
- **Incompatible Materials:** Metals. Oxidizers. Acids.

**Specific End Use(s)**

Neutralization of acids, pH control, gas scrubbing, catalyst. Used in manufacture of pulp and paper, petroleum and natural gas, soap and detergents and cellulosic. Also used in water treatment, food processing, mining and metal processing.
## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

<table>
<thead>
<tr>
<th>Sodium hydroxide (1310-73-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mexico</strong> OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td><strong>USA ACGIH</strong> ACGIH Ceiling (mg/m³)</td>
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<tr>
<td><strong>USA OSHA</strong> OSHA PEL (TWA) (mg/m³)</td>
</tr>
<tr>
<td><strong>USA NIOSH</strong> NIOSH REL (ceiling) (mg/m³)</td>
</tr>
<tr>
<td><strong>USA IDLH</strong> US IDLH (mg/m³)</td>
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<tr>
<td><strong>Alberta</strong> OEL Ceiling (mg/m³)</td>
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<tr>
<td><strong>British Columbia</strong> OEL Ceiling (mg/m³)</td>
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<tr>
<td><strong>Manitoba</strong> OEL Ceiling (mg/m³)</td>
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<tr>
<td><strong>New Brunswick</strong> OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td><strong>Newfoundland &amp; Labrador</strong> OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td><strong>Nova Scotia</strong> OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td><strong>Nunavut</strong> OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td><strong>Northwest Territories</strong> OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td><strong>Ontario</strong> OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td><strong>Prince Edward Island</strong> OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td><strong>Québec</strong> PLAFO ND (mg/m³)</td>
</tr>
<tr>
<td><strong>Saskatchewan</strong> OEL Ceiling (mg/m³)</td>
</tr>
<tr>
<td><strong>Yukon</strong> OEL Ceiling (mg/m³)</td>
</tr>
</tbody>
</table>

### Exposure Controls

**Appropriate Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.


**Materials for Protective Clothing:** Chemically resistant materials and fabrics. Corrosion-proof clothing.

**Hand Protection:** Wear protective gloves.

**Eye Protection:** Chemical safety goggles and face shield.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

**Other Information:** When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

| Physical State | Liquid |
| Appearance     | Clear to white |
| Odor           | None |
| Odor Threshold | Not available |
| pH             | 14 |
| Evaporation Rate | Not available |
| Melting Point  | 12 °C (53.6 °F) |
Sodium hydroxide, 50% solution, Membrane and Diaphragm Grade

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Freezing Point : Not available
Boiling Point : 143 °C (289.4 °F)
Flash Point : Not applicable
Auto-ignition Temperature : Not applicable
Decomposition Temperature : Not available
Flammability (solid, gas) : Not applicable
Lower Flammable Limit : Not applicable
Upper Flammable Limit : Not applicable
Vapor Pressure : 0.2 kPa
Relative Vapor Density at 20°C : Not available
Relative Density : Not available
Specific Gravity : 1.531 g/cm³ @ 20 °C (68 °F)
Solubility : Easily soluble in the following materials: cold water and hot water.
Partition Coefficient: N-Octanol/Water : Not available
Viscosity : Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Extremely high or low temperatures and incompatible materials.


Hazardous Decomposition Products: Hydrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified
Acute Toxicity (Dermal): Not classified
Acute Toxicity (Inhalation): Not classified
LD50 and LC50 Data: Not available
Skin Corrosion/Irritation: Causes severe skin burns and eye damage.
ph: 14
Eye Damage/Irritation: Causes serious eye damage.
ph: 14
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Carcinogenicity: Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Aspiration Hazard: Not classified

Symptoms/Effects After Inhalation: May be corrosive to the respiratory tract.
Symptoms/Effects After Skin Contact: Causes severe irritation which will progress to chemical burns.
Symptoms/Effects After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.
Symptoms/Effects After Ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.
Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data: Not available
SECTION 12: ECOLOGICAL INFORMATION

Toxicity
Ecology - General: Harmful to aquatic life.

Sodium hydroxide (1310-73-2)

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>EC50 Daphnia 1</th>
<th>LC50 Fish 1</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>40 mg/l</td>
<td>45.4 mg/l</td>
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</tbody>
</table>

Persistence and Degradability

Sodium hydroxide, 50% solution, Membrane and Diaphragm Grade

| Persistence and Degradability | Not established. |

Bioaccumulative Potential

Sodium hydroxide, 50% solution, Membrane and Diaphragm Grade

| Bioaccumulative Potential | Not established. |

Mobility in Soil
Not available

Other Adverse Effects
Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

<table>
<thead>
<tr>
<th>TRANSPORTATION CLASSIFICATION</th>
<th>DOT</th>
<th>TDG</th>
<th>IMDG</th>
<th>IATA</th>
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<td>Proper Shipping Name</td>
<td>SODIUM HYDROXIDE SOLUTION</td>
<td>SODIUM HYDROXIDE SOLUTION</td>
<td>SODIUM HYDROXIDE SOLUTION</td>
<td>SODIUM HYDROXIDE SOLUTION</td>
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<tr>
<td>Transport Hazard Class(es)</td>
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<tr>
<td>Packing Group</td>
<td>II</td>
<td>II</td>
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<tr>
<td>Environmental Hazards</td>
<td>Marine Pollutant: No</td>
<td>Marine Pollutant: No</td>
<td>Marine Pollutant: No</td>
<td>Marine Pollutant: N/A</td>
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<td>Emergency Response</td>
<td>ERG Number: 154</td>
<td>ERAP Index: Not applicable</td>
<td>EMS: F-A, S-B</td>
<td>ERG code (IATA): 8L</td>
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<td>Additional Information</td>
<td>Not applicable</td>
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SECTION 15: REGULATORY INFORMATION

US Federal Regulations

<table>
<thead>
<tr>
<th>Chemical Name (CAS No.)</th>
<th>CERCLA RQ</th>
<th>EPCRA 304 RQ</th>
<th>SARA 302 TPQ</th>
<th>SARA 313</th>
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<tbody>
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<td>1000 lb</td>
<td>Not applicable</td>
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<td>Sodium hydroxide, 50% solution, Membrane and Diaphragm Grade</td>
<td>Immediate (acute) health hazard</td>
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SARA 311/312

US TSCA Flags Not present
Sodium hydroxide, 50% solution, Membrane and Diaphragm Grade

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US State Regulations

California Proposition 65

<table>
<thead>
<tr>
<th>Chemical Name (CAS No.)</th>
<th>Carcinogenicity</th>
<th>Developmental Toxicity</th>
<th>Female Reproductive Toxicity</th>
<th>Male Reproductive Toxicity</th>
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</table>

State Right-To-Know Lists

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<th>Sodium hydroxide (1310-73-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - Massachusetts - Right To Know List - Yes</td>
</tr>
<tr>
<td>U.S. - New Jersey - Right to Know Hazardous Substance List - Yes</td>
</tr>
<tr>
<td>U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - Yes</td>
</tr>
<tr>
<td>U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No</td>
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<tr>
<td>U.S. - Pennsylvania - RTK (Right to Know) List - Yes</td>
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Canadian Regulations

<table>
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<th>Sodium hydroxide (1310-73-2)</th>
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<tbody>
<tr>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Not listed on the Canadian NDSL (Non-Domestic Substances List)</td>
</tr>
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International Inventories/Lists

<table>
<thead>
<tr>
<th>Chemical Name (CAS No.)</th>
<th>Australia AICS</th>
<th>Turkey CICR</th>
<th>Korea ECL</th>
<th>EU EINECS</th>
<th>EU ELINCS</th>
<th>EU SVHC</th>
<th>EU NLP</th>
<th>Mexico INSQ</th>
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<tbody>
<tr>
<td>Sodium hydroxide (1310-73-2)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name (CAS No.)</th>
<th>China IECSC</th>
<th>Japan ENCS</th>
<th>Japan ISHL</th>
<th>Japan PDSCL</th>
<th>Japan PRTR</th>
<th>Philippines PICCS</th>
<th>New Zealand NZIOC</th>
<th>US TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide (1310-73-2)</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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<td>Yes</td>
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SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 06/24/2019

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada’s Hazardous Products Regulations (HPR).

Revision Summary

<table>
<thead>
<tr>
<th>Section</th>
<th>Change</th>
<th>Date Changed</th>
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<tbody>
<tr>
<td>Section 4</td>
<td>Language modified</td>
<td>06/24/2019</td>
</tr>
<tr>
<td>Section 11</td>
<td>Language modified</td>
<td>06/24/2019</td>
</tr>
</tbody>
</table>

GHS Full Text Phrases:

<table>
<thead>
<tr>
<th>Aquatic Acute 3</th>
<th>Hazardous to the aquatic environment - Acute Hazard Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation Category 1</td>
</tr>
<tr>
<td>Met. Corr. 1</td>
<td>Corrosive to metals Category 1</td>
</tr>
<tr>
<td>Skin Corr. 1A</td>
<td>Skin corrosion/irritation Category 1A</td>
</tr>
<tr>
<td>H290</td>
<td>May be corrosive to metals</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H402</td>
<td>Harmful to aquatic life</td>
</tr>
</tbody>
</table>
Sodium hydroxide, 50% solution, Membrane and Diaphragm Grade
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NFPA 704

NFPA Health Hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.
NFPA Fire Hazard : 0 - Materials that will not burn.
NFPA Reactivity Hazard : 0 - Material that in themselves are normally stable, even under fire conditions.

HMIS Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
Flammability : 0 Minimal Hazard
Physical : 0 Minimal Hazard
PPE : See Section 8

NSF - 60

This product has been certified to NSF/ANSI 60 for a Maximum Use Level (MUL) of 100 mg/L.

Abbreviations and Acronyms

AICS – Australian Inventory of Chemical Substances
ACGIH – American Conference of Governmental Industrial Hygienists
AIHA – American Industrial Hygiene Association
ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor
BEI - Biological Exposure Indices (BEI)
CAS No. - Chemical Abstracts Service number
CERCLA RQ - Comprehensive Environmental Response, Compensation, and Liability Act - Reportable Quantity
CICR - Turkish Inventory and Control of Chemicals
EC50 - Median effective concentration
EC50 - Median effective concentration
ECL - Korea Existing Chemicals List
EINECS - European Inventory of Existing Commercial Chemical Substances
ELINCS - European List of Notified Chemical Substances
EmS - IMDG Emergency Schedule Fire & Spillage
ENCS - Japanese Existing and New Chemical Substances Inventory
EPA – Environmental Protection Agency
EPICRA 304 RQ – EPCRA 304 Extremely Hazardous Substance Emergency
Planning and Community Right-to-Know Act – Reportable Quantity
ERAP Index – Emergency Response Assistance Plan Quantity Limit
ErC50 - EC50 in Terms of Reduction Growth Rate
ERG code (JATA) - Emergency Response Drill Code as found in the International Civil Aviation Organization (ICAO)
ERG No. - Emergency Response Guide Number
HCCL - Hazard Communication Carcinogen List
HMIS – Hazardous Materials Information System
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association – Dangerous Goods Regulations
IDLH - Immediately Dangerous to Life or Health
IECSC - Inventory of Existing Chemical Substances Produced or Imported in China
IMDG - International Maritime Dangerous Goods Code
INSQ - Mexican National Inventory of Chemical Substances
ISHL - Japan Industrial Safety and Health Law

LC50 - Median Lethal Concentration
LDS0 - Median Lethal Dose
LOAEL - Lowest Observed Adverse Effect Level
LOEC - Lowest-observed-effect Concentration
Log Pow - Octanol/water Partition Coefficient
NIOSH - National Institute for Occupational Safety and Health
NLP - Europe No Longer Polymers List
NOAEL - No-Observed Adverse Effect Level
NOEC - No-Observed Effect Concentration
NZIOC - New Zealand Inventory of Chemicals
OEL - Occupational Exposure Limits
OSHA – Occupational Safety and Health Administration
PEL - Permissible Exposure Limits
PICCS - Philippine Inventory of Chemicals and Chemical Substances
PDSCL - Japan Poisonous and Deleterious Substances Control Law
PPE – Personal Protective Equipment
PRTR - Japan Pollutant Release and Transfer Register
REL - Recommended Exposure Limit
REL - Recommended Exposure Limit
SADT - Self Accelerating Decomposition Temperature
SARA - Superfund Amendments and Reauthorization Act
SARA 302 - Section 302, 40 CFR Part 355
SARA 303 - Section 303, 40 CFR Part 370 Hazard Categories
SARA 311/312 - Sections 311 and 312, 40 CFR Part 370
SARA 313 - Sections 313, 40 CFR Part 372
SARCL - Specifically Regulated Carcinogen List
STEL - Short Term Exposure Limit
SVHC – European Candidate List of Substance of Very High Concern
TDG – Transport Canada Transport of Dangerous Goods Regulations
TLM - Median Tolerance Limit
TLV - Threshold Limit Value
TPQ - Threshold Planning Quantity
TSCA – United StatesToxic Substances Control Act
TWA - Time Weighted Average
WEEL - Workplace Environmental Exposure Levels
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