SODIUM HYDROXIDE 8M SOLUTION MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product code : 5901J

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.
107 Wode House Road, Jehangir Villa, Colaba
400005 Mumbai - INDIA
T +91 22 6663 6663 - F +91 22 6663 6699
info@lobachemie.com - www.lobachemie.com

1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC
Not classified

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements

Labelling according to Directive 67/548/EEC or 1999/45/EC
No labelling applicable
2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Directive 67/548/EEC</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>(CAS No) 7732-18-5 (EC no) 231-791-2</td>
<td>50 - 75</td>
<td>Not classified</td>
<td>Not classified</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>(CAS No) 1310-73-2 (EC no) 215-185-5</td>
<td>25 - 50</td>
<td>C; R35</td>
<td>Skin Corr. 1A, H314</td>
</tr>
</tbody>
</table>

Full text of R- and H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures after inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after skin contact: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after eye contact: 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.
First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries: Causes severe skin burns and eye damage.

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).
Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture
No additional information available

5.3. Advice for firefighters
Protection during firefighting: Do not attempt to take action without suitable protective equipment.
### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel
- **Emergency procedures**: Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders
- **Protective equipment**: Use personal protective equipment as required.
- **Emergency procedures**: Stop release.

#### 6.2. Environmental precautions
Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up
- **Methods for cleaning up**: Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

#### 6.4. Reference to other sections
No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling
- **Precautions for safe handling**: Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact during pregnancy/while nursing.
- **Hygiene measures**: Wash ... thoroughly after handling.

#### 7.2. Conditions for safe storage, including any incompatibilities
- **Technical measures**: Comply with applicable regulations.
- **Storage conditions**: Store in original container. Keep container tightly closed. Store in a dry place.

#### 7.3. Specific end use(s)
No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters
No additional information available

#### 8.2. Exposure controls
- **Hand protection**: protective gloves
- **Eye protection**: Chemical goggles or face shield
- **Skin and body protection**: Wear suitable protective clothing
- **Respiratory protection**: Wear respiratory protection

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties
- **Physical state**: Liquid
- **Colour**: Clear Colorless.
Odour: No data available
Odour threshold: No data available
pH: No data available
Relative evaporation rate (butylacetate=1): No data available
Melting point: No data available
Freezing point: No data available
Boiling point: No data available
Flash point: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapour pressure: No data available
Relative vapour density at 20 °C: No data available
Relative density: No data available
Solubility: No data available
Log Pow: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive properties: No data available
Oxidising properties: No data available
Explosive limits: No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
Thermal decomposition generates: Corrosive vapours.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No additional information available

10.4. Conditions to avoid
Direct sunlight. Air contact.

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Thermal decomposition generates: Corrosive vapours.
SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Irritation : Not classified
Corrosivity : Not classified
Sensitisation : Not classified
Repeated dose toxicity : Not classified
Carcinogenicity : Not classified
Mutagenicity : Not classified
Toxicity for reproduction : Not classified

SECTION 12: Ecological information

12.1. Toxicity
No additional information available

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
No additional information available

12.6. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Product/Packaging disposal recommendations : Dispose of contents/container to ...

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number
UN-No. (ADR) : 1824
# SODIUM HYDROXIDE 8M SOLUTION
## Safety Data Sheet

| UN-No. (IMDG) | : 1824 |
| UN-No.(IATA)  | : 1824 |
| UN-No.(ADN)   | : 1824 |
| UN-No. (RID)  | : 1824 |

### 14.2. UN proper shipping name

| Proper Shipping Name (ADR)       | : SODIUM HYDROXIDE SOLUTION |
| Proper Shipping Name (IMDG)      | : SODIUM HYDROXIDE SOLUTION |
| Proper Shipping Name (IATA)      | : SODIUM HYDROXIDE SOLUTION |
| Proper Shipping Name (ADN)       | : SODIUM HYDROXIDE SOLUTION |
| Proper Shipping Name (RID)       | : SODIUM HYDROXIDE SOLUTION |
| Transport document description (ADR) | : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II, (E) |
| Transport document description (IMDG) | : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II |
| Transport document description (IATA) | : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II |
| Transport document description (ADN) | : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II |
| Transport document description (RID) | : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II |

### 14.3. Transport hazard class(es)

#### ADR

| Transport hazard class(es) (ADR) | : 8 |
| Danger labels (ADR)              | : 8 |

#### IMDG

| Transport hazard class(es) (IMDG) | : 8 |
| Danger labels (IMDG)              | : 8 |

#### IATA

| Transport hazard class(es) (IATA) | : 8 |
| Hazard labels (IATA)              | : 8 |

#### ADN

| Transport hazard class(es) (ADN) | : 8 |
| Danger labels (ADN)              | : 8 |
SODIUM HYDROXIDE 8M SOLUTION
Safety Data Sheet

RID
Transport hazard class(es) (RID) : 8
Danger labels (RID) : 8

14.4. Packing group
Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards
Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport
Classification code (ADR) : C5
Limited quantities (ADR) : 1L
Excepted quantities (ADR) : E2
Packing instructions (ADR) : P001, IBC02
Mixed packing provisions (ADR) : MP15
Portable tank and bulk container instructions (ADR) : T7
Portable tank and bulk container special provisions (ADR) : TP2
Tank code (ADR) : L4BN
Vehicle for tank carriage : AT
Transport category (ADR) : 2
Hazard identification number (Kemler No.) : 80
Orange plates : 80
1824
Tunnel restriction code (ADR) : E
EAC code : 2R

- Transport by sea
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TP2
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B
## SODIUM HYDROXIDE 8M SOLUTION

### Safety Data Sheet

| Stowage category (IMDG)                  | A                   |
| Segregation (IMDG)                      | SG35                |
| MFAG-No                                  | 154                 |

**- Air transport**

- PCA Excepted quantities (IATA): E2
- PCA Limited quantities (IATA): Y840
- PCA limited quantity max net quantity (IATA): 0.5L
- PCA packing instructions (IATA): 851
- PCA max net quantity (IATA): 1L
- CAO packing instructions (IATA): 855
- CAO max net quantity (IATA): 30L
- Special provision (IATA): A3
- ERG code (IATA): 8L

**- Inland waterway transport**

- Classification code (ADN): C5
- Limited quantities (ADN): 1 L
- Excepted quantities (ADN): E2
- Carriage permitted (ADN): T
- Equipment required (ADN): PP, EP
- Number of blue cones/lights (ADN): 0

**- Rail transport**

- Classification code (RID): C5
- Limited quantities (RID): 1L
- Excepted quantities (RID): E2
- Packing instructions (RID): P001, IBC02
- Mixed packing provisions (RID): MP15
- Portable tank and bulk container instructions (RID): T7
- Portable tank and bulk container special provisions (RID): TP2
- Tank codes for RID tanks (RID): L4BN
- Transport category (RID): 2
- Colis express (express parcels) (RID): CE6
- Hazard identification number (RID): 80

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

### SECTION 15: Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**15.1.1. EU-Regulations**

Contains no substances with Annex XVII restrictions
Contains no REACH candidate substance
Contains no REACH Annex XIV substances.
15.1.2. National regulations

Germany
AwSV/VwVwS Annex reference: Water hazard class (WGK) 3, strongly hazardous to water (Classification according to AwSV, Annex 1)
12th Ordinance Implementing the Federal Immission Control Act - 12.BlImSchV: Is not subject of the 12. BlImSchV (Hazardous Incident Ordinance)

Denmark
Recommendations Danish Regulation: Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment
No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

<table>
<thead>
<tr>
<th>R- Code</th>
<th>EUH Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corr. 1A</td>
<td>Skin corrosion/irritation, Category 1A</td>
<td></td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
<td></td>
</tr>
<tr>
<td>R35</td>
<td>Causes severe burns</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Corrosive</td>
<td></td>
</tr>
</tbody>
</table>

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.