1 Identification of the substances/ mixture and of the company/ undertaking

1.1 Product Identifiers
Product Number  ML026
Product Name  5M Sodium hydroxide
REACH Registration Number  Reach registration number is not available for this mixture. The annual tonnage does not require a REACH registration or it is envisaged for a later registration deadline.

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

1.3 Details of the supplier of the safety data sheet
Produced by  HiMedia Laboratories Private Limited
Address  23, Vadhani Industrial Estate, LBS Marg, Ghatkopar (W), Mumbai   -   400 086 India
Tel. No.  +91-22-2500 0970, +91-22-2500 1607 Fax No.  :   +91-22-25002468
Mail Id  mb@himedialabs.com
Website  : www.himedialabs.com

1.4 Emergency Tel. No.
Emergency Tel. No.  Please contact the regional HiMedia representation in your country

2 Hazards Identification

2.1 Classification of the substance or mixture
CLP Classification-Regulation (EC) No. 1272/2008[EU-GHS/CLP]
Corrosive to metals, (Category 1), H290
Skin corrosion or irritation, (Category 1A), H314
Serious eye damage or eye irritation, (Category 1), H318

2.2 Label elements
Labeling according to Regulation (EC) No.1272/2008

Pictogram
Signal word  Danger
Hazard Statement(s)
H290  May be corrosive to metals
H314  Causes severe skin burns and eye damage
H318  Causes serious eye damage
Precautionary Statement(s)
P260  Do not breathe dust/fume/gas/mist/vapours/spray.
P280  Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P304+P340+P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

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/physician.

2.3 Other Hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3 Composition/Information On Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide pellets, For Molecular Biology</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=15 - &lt;=25%</td>
</tr>
<tr>
<td>EC No. : 215-185-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index-No : 011-002-00-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular Formula : NaOH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular Weight : 40.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 First Aid Measures

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse immediately with plenty of water for at least 15 minutes. Consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

4.3 Indication of immediate medical attention and special treatment needed
Treat symptomatically.
5 Fire Fighting Measures

5.1 Extinguishing media

*Suitable extinguishing media*
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

*Unsuitable extinguishing media*
No data available.

5.2 Special hazards arising from the substance or mixture

Sodium oxides

5.3 Precautions for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary

5.4 Further information
No data available

6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personnel protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. For personal protection see section 8.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Soak up with inert adsorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see Section 13.

7 Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Non Combustible Liquids

*Recommended Storage Temperature*: Store between 15-25°C

7.3 Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8 Exposure Controls/Personal Protection

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

*Appropriate engineering controls*

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products.

*Personal protective equipment*

*Hygiene measure*
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product.

**Eye/face protection**
Tightly fitting safety goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Body protection**
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Environment exposure controls**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 9 Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (Solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>No data available</td>
</tr>
</tbody>
</table>

#### 9.2 Other safety information

No data available
10  Stability and Reactivity
10.1  Reactivity
No data available
10.2  Chemical stability
Stable under recommended storage conditions.
10.3  Possibility of hazardous reactions
No data available
10.4  Conditions to avoid
No data available
10.5  Incompatible materials
Water, acids, Organic materials, Chlorinated solvents, Aluminum, Phosphorus, Tin/tin oxides, Zinc
10.6  Hazardous decomposition products
In the event of fire. Refer section 5

11  Toxicological Information
11.1  Information on toxicological effects
   Acute toxicity
   No data available
   Skin corrosion/irritation
   No data available
   Serious eye damage/eye irritation
   No data available
   Respiratory or skin sensitisation
   No data available
   Germ cell mutagenicity
   No data available
   Carcinogenicity
   IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
   Reproductive toxicity
   No data available
   Specific target organ toxicity- single exposure
   No data available

   Aspiration hazard
   No data available
   Additional Information
   RTECS : Not Applicable

12  Ecological Information
12.1  Toxicity
No data available

12.2  Persistence and degradability
12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 PBT and vPvB assessment
No data available

12.6 Other adverse effects
No data available

13 Disposal Considerations
13.1 Waste treatments methods
Product
Offer surplus and non-recyclable solutions to a licenced disposal company.

13.2 Contaminated packaging
Dispose of as unused product.

14 Transport Information
14.1 UN-No
ADNR : 1824  ADR : 1824  IATA_C : 1824  IATA_P : 1824  IMDG : 1824  RID : 1824

14.2 UN proper shipping name
ADNR    : Sodium hydroxide solution
ADR     : Sodium hydroxide solution
IATA_C  : Sodium hydroxide solution
IATA_P  : Sodium hydroxide solution
IMDG    : Sodium hydroxide solution
RID     : Sodium hydroxide solution

14.3 Transport hazard class(es)
ADNR : 8  ADR : 8  IATA_C : 8  IATA_P : 8  IMDG : 8  RID : 8

14.4 Packaging group
ADNR : II  ADR : II  IATA_C : II  IATA_P : II  IMDG : II  RID : II

14.5 Environmental hazards
ADNR : No  ADR : No  IMDG : Marine pollutant : no  IATA_C : No  IATA_P : No  RID : No

14.6 Special precautions for use
No data available

15 Regulatory Information
15.1 Safety health and environment regulations/legislation specific for the substance or mixture
No data available

15.2 Chemical Safety Assessment
No data available
16 Other information

H290 May be corrosive to metals
H314 Causes severe skin burns and eye damage
Met. Corr. 1 Corrosive to metals, Category 1
Skin Corr. 1A Skin corrosion or irritation, Category 1A

Further Information

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