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

1.1 Product Identifiers

Product Number  ML002
Product Name  8M Guanidine HCl
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]
Acute toxicity, Oral, (Category 4), H302
Acute toxicity, Inhaled, (Category 4), H332
Skin corrosion or irritation, (Category 2), H315
Serious eye damage or eye irritation, (Category 2A), H319

2.2 Label elements

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

Pictogram
Signal word  Warning
Hazard Statement(s)
H302  Harmful if swallowed
H332  Harmful if inhaled
H315  Causes skin irritation
H319  Causes serious eye irritation
Precautionary Statement(s)
P261  Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312+P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 IF eye irritation persists: Get medical advice/attention.

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>Guanidine hydrochloride</td>
<td></td>
<td>&gt;=70 - &lt;=90%</td>
</tr>
<tr>
<td>CAS No. : 50-01-1</td>
<td>As Per EC Regulation 1272/2008</td>
<td></td>
</tr>
<tr>
<td>EC No. : 200-002-3</td>
<td>Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit. 2A; Acute Tox.inhal. 4</td>
<td></td>
</tr>
<tr>
<td>Index-No : 607-148-00-0</td>
<td>H302; H315; H332</td>
<td></td>
</tr>
<tr>
<td>Molecular Formula : CH₅N₃.HCl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular weight : 95.53</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
Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas

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**
Do not let product enter drains.

### 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>4.5 - 6.0</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
   Strong oxidizing agents
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 : ADR : IATA_C : IATA_P : IMDG : RID :

14.2 UN proper shipping name
ADNR : Not dangerous goods
ADR : Not dangerous goods
IATA_C : Not dangerous goods
IATA_P : Not dangerous goods
IMDG : Not dangerous goods
RID : Not dangerous goods

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

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

14.5 Environmental hazards
ADNR : No ADR : No IMDG : 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

<table>
<thead>
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</tr>
<tr>
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<td>Acute toxicity, inhaled, Category 4</td>
</tr>
<tr>
<td>Acute Tox.oral 4</td>
<td>Acute toxicity, oral, Category 4</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage or eye irritation, Category 2A</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion or irritation, Category 2</td>
</tr>
</tbody>
</table>

Further Information

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The information given in this safety data sheet is believed to be correct yet does not claim to be all inclusive. This document is intended only as a guide for appropriate precautionary handling of the material by properly trained individuals, information here being commensurate with the present state of our knowledge regarding the manner and conditions of use, handling, storage or disposal. The information provided herein shall not be considered as guarantee of the properties of the product. HiMedia Laboratories, shall not be held liable for any damage resulting from improper handling or contact with the above product. Unless explicitly stated on the product or in any of the documentation accompanying the product, it is intended for research or testing purpose only and is not to be used for any other purpose.