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

1.1 Product Identifiers

Product Number: G115

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

1.2.1 Relevant identified uses

Laboratory chemicals, Manufacture of substances

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
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]

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)

H315 Causes skin irritation
H319 Causes serious eye irritation

Precautionary Statement(s)

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 Wash body parts in contact thoroughly after handling.
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
None

3 Composition/Information On Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>L-Arginine</td>
<td></td>
<td>&gt;= -</td>
</tr>
<tr>
<td>CAS No. : 74-79-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC No. : 200-811-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular Formula : C₆H₁₄N₄O₂</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular Weight : 174.20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Adenine             | As Per EC Regulation 1272/2008                      | >= -          |
| CAS No. : 73-24-5   |                                                     |               |
| EC No. : 200-796-1  |                                                     |               |
| Molecular Formula : C₅H₅N₅ |                                   |               |
| Molecular Weight : 135.13    |                                             |               |

| L-Methionine        |                                                     | >= -          |
| CAS No. : 63-68-3   |                                                     |               |
| EC No. : 200-562-9  |                                                     |               |
| Molecular Formula : C₅H₁₁NO₂S |                                   |               |
| Molecular Weight : 149.21    |                                             |               |

| L-Leucine           |                                                     | >= -          |
| CAS No. : 61-90-5   |                                                     |               |
| EC No. : 200-522-0  |                                                     |               |
| Molecular Formula : C₆H₁₃NO₂ |                                   |               |
| Molecular Weight : 131.17    |                                             |               |

| L-Phenylalanine     |                                                     | >= -          |
| CAS No. : 63-91-2   |                                                     |               |
| EC No. : 200-568-1  |                                                     |               |
| Molecular Formula : C₉H₁₁NO₂ |                                   |               |
| Molecular Weight : 165.19    |                                             |               |
### Component Classification Concentration

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>L-Histidine</td>
<td></td>
<td>&gt;= -</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>71-00-1</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>200-745-3</td>
<td></td>
</tr>
<tr>
<td>Molecular Formula :</td>
<td>C₆H₉N₃O₂</td>
<td></td>
</tr>
<tr>
<td>Molecular Weight :</td>
<td>155.15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>L-Threonine</td>
<td></td>
<td>&gt;= -</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>72-19-5</td>
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<tr>
<td>EC No. :</td>
<td>200-774-1</td>
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<tr>
<td>Molecular Formula :</td>
<td>C₄H₉NO₃</td>
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</tr>
<tr>
<td>Molecular Weight :</td>
<td>119.12</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
When heated to decomposition, emits toxic fumes.

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 10-30°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**
No special environmental precautions required.

---

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>White to cream coloured, homogeneous free flowing powder.</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>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**
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**
No data available

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 : 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
H301 Toxic if swallowed
Acute Tox. oral. 3 Acute toxicity, oral, Category 3

Further Information
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