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

1.1 **Product Identifiers**
- **Product Code**: RM777
- **Product Name**: 5-Azacytidine, Hi-LR™

1.2 **Relevant identified uses of the substance or mixture and uses advised against**
- **Identified uses**: Laboratory chemicals, Manufacture of substances

1.3 **Details of the supplier of the safety data sheet**
- **Produced by**: HiMedia Laboratories Pvt. Ltd.
- **Address**: 23, Vadhani Indl.Estate, LBS Marg, Mumbai 400 086, India.
- **Tel. No.**: +91-22-2500 0970, +91-22-2500 1607
- **Fax No.**: +91-22-2500 2468

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**
- **Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]**
  - Acute toxicity, oral (Category 4)
  - Carcinogenicity (Category 1A, 1B)

- **Classification according to EU Directives 67/548/EEC or 1999/45/EC**
  - May cause cancer.
  - May cause heritable genetic damage.
  - Harmful if swallowed.

2.2 **Label elements**
- **Labelling according Regulation (EC) No 1272/2008 [CLP]**
  - **Pictogram**
  - **Signal word**: Danger
  - **Hazard Statement(s)**
    - H302 Harmful if swallowed
    - H350 May cause cancer
  - **Precautionary Statement(s)**
    - P201 Obtain special instructions before use.
    - P308 + P313 IF exposed or concerned: Get medical advice/attention.

**According to European Directive 67/548/EEC as amended.**

- **Symbol(s)**
  - **R-Phrase(s)**
    - R45 May cause cancer.
    - R46 May cause heritable genetic damage.
    - R22 Harmful if swallowed.
2.3 Other hazards - none

3. Composition/Information on Ingredients

3.1 Substances

Synonym: Ladakamycin, Hi-LR™

Molecular Formula: $\text{C}_8\text{H}_{12}\text{O}_5\text{N}_4$
Molecular Weight: 244.20

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-Azacytidine, Hi-LR™</td>
<td></td>
</tr>
<tr>
<td>CAS-No.</td>
<td>320-67-2</td>
</tr>
<tr>
<td>EC-No.</td>
<td>206-280-2</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 thoroughly with plenty of water for at least 15 minutes and 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

No data available

4.3 Indication of immediate medical attention and special treatment needed

No data available

5. Fire Fighting Measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NOx)

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
Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Soak up with inert absorbent 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. Normal measures for preventive fire protection.

7.3 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end uses
No data available

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 product.

Personal protective equipment
Hygiene measure
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands face after working with the substance

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 of 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 work place.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK(EN 14387) respirator cartridges as a backup to the 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 empty into drains

9 Physical and chemical properties
9.1 Information on basic physical and chemical properties
<table>
<thead>
<tr>
<th><strong>Appearance</strong></th>
<th>White to off-white crystals or powder</th>
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</thead>
<tbody>
<tr>
<td>Odour</td>
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</tr>
<tr>
<td>Odour Threshold</td>
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</tr>
<tr>
<td>pH</td>
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</tr>
<tr>
<td>Melting/freezing point</td>
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</tr>
<tr>
<td>Initial boiling point and boiling range</td>
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</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
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</tr>
<tr>
<td>Vapour pressure</td>
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<tr>
<td>Vapour density</td>
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</tr>
<tr>
<td>Relative density</td>
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</tr>
<tr>
<td>Water Solubility</td>
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</tr>
<tr>
<td>Partition coefficient: n-octanol/Water</td>
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</tr>
<tr>
<td>Autoignition Temperature</td>
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</tr>
<tr>
<td>Decomposition Temperature</td>
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</tr>
<tr>
<td>Viscosity</td>
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<tr>
<td>Explosive properties</td>
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</tr>
<tr>
<td>Oxidizing properties</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**  
No data available

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**  
Other decomposition products - No data available

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

**Potential Health Effects**  
Inhalation.
Refer Section 2

**Skin**
Refer Section 2

**Eyes**
Refer Section 2

**Ingestion**
Refer Section 2

**Additional Information**
RTECS: XZ3017500

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### 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

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### 13 Disposal Considerations

#### 13.1 Waste treatments methods

**Product**
Offer surplus and non-recyclable solutions to a licenced disposal company. Contact a licenced professional waste disposal service to dispose of this material.

**Contaminated packaging**
Dispose of as unused product.

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### 14 Transport Information

#### 14.1 UN-No.
ADR/RID: -  IMDG: -  IATA: -

#### 14.2 UN proper shipping name
ADR/RID: no dangerous goods
IMDG: no dangerous goods
IATA: no dangerous goods

#### 14.3 Transport hazard class(es)
ADR/RID: -  IMDG: -  IATA: -

#### 14.4 Packaging group
ADR/RID: -  IMDG: -  IATA: -

#### 14.5 Environmental hazards
ADR/RID: No  IMDG: Marine Pollutant:No  IATA: No

#### 14.6 Special precautions for use
No data available

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### 15 Regulatory Information

This safety datasheet complies with the requirements of Regulation(EC) No.1907/2006

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

#### 15.2 Chemical Safety Assessment
16 Other Information
Further information
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