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

### 1.1 Product Identifiers
- **Product Number**: M783
- **Product Name**: Photobacterium Broth
- **REACH Registration Number**: This product is a mixture. Reach registration number is not available for this mixture.

### 1.2 Relevant identified uses of the substance or mixture and uses advised against
- **Relevant identified uses**: Laboratory Chemicals, Analytical Purpose, Biochemical Analysis

### 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.**: +91-22-2500 2468
- **Mail Id**: info@himedialabs.com
- **Website**: www.himedialabs.com

### 1.4 Emergency Tel. No.
- **Emergency Tel. No.**: Please contact the regional HiMedia representation in your country

**Hazards Identification**

### 2.1 Classification of the substance or mixture
**CLP Classification-Regulation (EC) No. 1272/2008 [EU-GHS/CLP]**
Not a hazardous substance or mixture according to Regulation (EC) No.1272/2008.

### 2.2 Label elements
**Labeling according to Regulation (EC) No.1272/2008**
The product does not need to be labelled in accordance with EC directives or respective national laws.

### 2.3 Other Hazards
None

**Composition/Information On Ingredients**

### 3.2 Mixture

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium chloride</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 - &lt;=1.0%</td>
</tr>
<tr>
<td>CAS No.: 12125-02-9</td>
<td>Acute Tox. oral 4; Eye Irrit. 2A H302;</td>
<td></td>
</tr>
<tr>
<td>EC No.: 235-186-4</td>
<td>H319</td>
<td></td>
</tr>
<tr>
<td>Index-008: 017-014-00-8</td>
<td>As Per EC Directive 67/548/EEC or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1999/45/EC</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
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.

Unsuitable extinguishing media
No data available.

5.2 Special hazards arising from the substance or mixture
Carbon oxides, nitrogen oxides (NOx), Sodium oxides, Hydrogen chloride gas, Magnesium oxide, Sulphur oxides, Iron oxides, Calcium oxide

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 vapours, 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 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. Normal measures for preventive fire protection.

7.2 **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.

*Recommended Storage Temperature*: On receipt 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 empty into drains.

9 Physical and chemical properties
9.1 Information on basic physical and chemical properties
Appearance
- Off-white to yellow coloured homogeneous free flowing powder
Odour
- No data available
Odour Threshold
- No data available
pH
- 6.80 - 7.20
Melting/freezing point
- No data available
Initial boiling point and boiling range
- No data available
Flash point
- No data available
Flammability (Solid, gas)
- No data available
Vapour pressure
- No data available
Relative density
- No data available
Water Solubility
- No data available
Partition coefficient: n-octanol/water
- No data available
Autoignition Temperature
- No data available
Viscosity
- No data available
Explosive properties
- No data available
Oxidizing properties
- No data available
Vapour density
- No data available
Thermal decomposition
- No data available

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
- No data available
10.6 Hazardous decomposition products
- Refer Section 5.2
11 Toxidological Information

11.1 Information on toxidological 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 : No data available

11.2 Components

Ammonium Chloride

Acute Oral toxicity
Rat LD50:1,650 mg/kg

Irritation and corrosion
Skin: rabbit: No skin irritation
Eyes: rabbit: Eye irritation

Sensitisation:
Non sensitizer

Signs and Symptoms of Exposure:
No data available

Potential Health Effects
**Inhalation**
May be harmful if inhaled. May cause respiratory tract irritation.

**Additional Information**
RTECS : BP4550000

**Ferric chloride**
Acute oral toxicity
Rat LD50: 3,200mg/kg (As per OECD Guideline 401)
Acute inhalation toxicity
No data available
Acute dermal toxicity
Rabbit LD50: > 559mg/kg (As per EPA OPP 81-2)
Skin irritation
Rabbit Result: Non Irritant (As per OECD Guideline 404)
Eye irritation
Rabbit Result: Irreversible effects on the eye (ECHA)
Sensitisation
Guinea pig Result: Not sensitising
Genetic toxicity (in-vitro)
Mammalian cell gene mutation assay
Mouse lymphoma cells Result : Negative
Genetic toxicity (in-vivo)
Mouse Result: Positive (ECHA)
Carcinogenicity
No data available
Toxicity to Reproduction
No data available
Teratogenicity
No data available

**Additional information:**
RTECS: LJ9100000

---

**12**

**12.1 Ecological Information**

**Toxicity**
No data available

**Components**

**Ammonium chloride**

*Toxicity to fish*
Oncorhynchus mykiss (rainbow trout) LC50: 42.91 mg/l; 96 h (As per ECHA)
Cyprinus carpio (Carp) LC50: 209.00 mg/l; 96 h
Lepomis macrochirus (Bluegill sunfish) EC10: 4.28 mg/l; 30 d (As per ECHA)

*Toxicity to daphnia and other aquatic invertebrates*
Daphnia magna (Water flea) EC50: > 100 mg/l; 48 h
(As per ECHA)
Daphnia magna (Water flea) LC50: 161 mg/l - 48 h

Toxicity to algae
Chlorella vulgaris (Fresh water algae) EC50: 1,300 mg/l; 5 d
(As per ECHA)

Toxicity to bacteria
EC50 activated sludge: 1,310 mg/l; 0.5 h
(OECD Test Guideline 209)

Components:
Ferric chloride

Toxicity to microorganisms
Activated sludge IC50: ca. 170 mg/L (ECHA)

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
This substance or mixture contains no components considered to be persistent, bioaccumulating nor toxic (PBT) at levels of 0.1% or higher.

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 company. Contact a licenced professional waste disposal service to dispose off this material.

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)

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<thead>
<tr>
<th>ADNR</th>
<th>ADR</th>
<th>IATA_C</th>
<th>IATA_P</th>
<th>IMDG</th>
<th>RID</th>
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<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

### 14.4 Packaging group

<table>
<thead>
<tr>
<th>ADNR</th>
<th>ADR</th>
<th>IATA_C</th>
<th>IATA_P</th>
<th>IMDG</th>
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<tbody>
<tr>
<td></td>
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</table>

### 14.5 Environmental hazards

<table>
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<tr>
<td>No</td>
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</tr>
</tbody>
</table>

### 14.6 Special precautions for use

No data available

### 15 Regulatory Information

This safety data sheet 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

No data available

### 16 Other information

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>H290</td>
<td>May be corrosive to metals</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>Acute Tox.oral 4</td>
<td>Acute toxicity, oral, Category 4</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage or eye irritation, Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage or eye irritation, Category 2A</td>
</tr>
<tr>
<td>Met. Corr. 1</td>
<td>Corrosive to metals, Category 1</td>
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<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion or irritation, Category 2</td>
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<tr>
<td>R22</td>
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<tr>
<td>R36</td>
<td>Irritating to eyes.</td>
</tr>
<tr>
<td>Xi</td>
<td>Irritant</td>
</tr>
<tr>
<td>Xn</td>
<td>Harmful</td>
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### Further Information

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