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

1.1  Product Identifiers
Product Number  M1384
Product Name  Lactic Acid Bacteria Selective Broth Base (Raka Ray No. 3 Broth Base)
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
1.2.1  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. : +91-22-25002468
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

2  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

3  Composition/Information On Ingredients

3.2  Mixture

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Betaine hydrochloride</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=1.0 - &lt;=10.0%</td>
</tr>
<tr>
<td>CAS No.:</td>
<td>590-46-5</td>
<td></td>
</tr>
<tr>
<td>EC No.:</td>
<td>209-683-1</td>
<td></td>
</tr>
</tbody>
</table>
### Component Classification

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diammonium hydrogen citrate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=1.0 - &lt;=10.0%</td>
</tr>
<tr>
<td>CAS No. : 3012-65-5</td>
<td>Eye Irrit. 2A; STOT SE 3</td>
<td></td>
</tr>
<tr>
<td>EC No. : 221-146-3</td>
<td>H319; H335</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manganese sulphate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 - &lt;=1.0%</td>
</tr>
<tr>
<td>CAS No. : 10034-96-5</td>
<td>STOT RE 2; Aquatic Chronic 2</td>
<td></td>
</tr>
<tr>
<td>EC No. : 232-089-9</td>
<td>H373; H411</td>
<td></td>
</tr>
<tr>
<td>Index-No : 025-003-00-4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Refer Section 16 for complete statement of H codes and its classification.

### 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.

**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), Hydrogen chloride gas, Oxides of phosphorus, Potassium oxides, Magnesium oxide, Manganese/manganese oxides, Sulphur oxides

#### 5.3 Precautions for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.
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**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Cream to beige 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>5.20 - 5.60</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>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>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition 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**
No data available

10.3 **Possibility of hazardous reactions**
No data available

10.4 **Conditions to avoid**
10.5 **Incompatible materials**
No data available

10.6 **Hazardous decomposition products**
Refer Section 5.2. Other Decomposition products not known.

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 : No data available

11.2 **Components**

*Manganese sulphate*

*Acute oral toxicity*
Rat LD50 :2,150 mg/kg
(As per IUCLID)

*Acute Dermal Toxicity*
Rat LD50: Not determined.

**Acute Inhalation Toxicity**
Rat LC50: > 4.45 mg/l
(As per OECD Test Guideline 403)

**Additional Information**
RTECS: OP1050000

---

12 **Ecological Information**

12.1 **Toxicity**
No data available

**Components**

**Manganese sulphate**

**Toxicity to Fish**
Onchorhyncus mykiss (Rainbow trout) LC50 : 14.5 mg/l; 96h.
Pimephales promelas (fathead minnow) LC50 : 30.6 mg/l; 96 h.

**Toxicity to daphnia and other aquatic invertebrates**
Daphnia magna (Water flea) EC50 : 8.3 mg/l; 48 h.

**Acute Toxicity to Aquatic Plants**
Desmodesmus subspicatus (algae) EC50 61 mg/l; 72 h
(As per OECD Test Guideline 201)

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)
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
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
H319 Causes serious eye irritation
H335 May cause respiratory irritation
H373 May cause damage to organs through prolonged or repeated exposure
H411 Toxic to aquatic life with long lasting effects
Aquatic Chronic 2 Hazardous to the aquatic environment, long term hazard, Category 2
Eye Irrit. 2A Serious eye damage or eye irritation, Category 2A
STOT RE 2 Specific target organ toxicity, repeated exposure, Category 2
STOT SE 3 Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3

Further Information
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