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

1.1 Product Identifiers

Product Number  M1164

Product Name  MRS Broth, Modified (Lactobacillus Heteroferm Screen 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

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>2-phenyl ethanol</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=1.0 - &lt;=10.0%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>Acute Tox. oral 4; Acute Tox. dermal. 3;</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>Skin Irrit. 2; Eye Dam. 1 H302; H311; H315; H318</td>
<td></td>
</tr>
<tr>
<td>Component</td>
<td>Classification</td>
<td>Concentration</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Ammonium 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  H319; H335</td>
<td></td>
</tr>
<tr>
<td>EC No. : 221-146-3</td>
<td></td>
<td></td>
</tr>
<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  H373; H411</td>
<td></td>
</tr>
<tr>
<td>EC No. : 232-089-9</td>
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<tr>
<td>Index-No: 025-003-00-4</td>
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</tr>
<tr>
<td>Cycloheximide</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.01 - &lt;=0.1%</td>
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<tr>
<td>CAS No. : 66-81-9</td>
<td>Acute Tox. oral 1,2; Skin Irrit. 2; Muta. 2; Repr. 1B; Aquatic Chronic 2  H300; H315; H341; H360D; H411</td>
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<tr>
<td>EC No. : 200-636-0</td>
<td></td>
<td></td>
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<tr>
<td>Index-No : 613-140-00-8</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.

*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), Oxides of phosphorus, Sodium oxides, Potassium oxides

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 2-8°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>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Light yellow to bluish grey homogenous free flowing powder</td>
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<tr>
<td>Odour</td>
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</tr>
<tr>
<td>Odour Threshold</td>
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</tr>
<tr>
<td>pH</td>
<td>4.10 - 4.50</td>
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<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>
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</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
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</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
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<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
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 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

Ammonium citrate
No toxicological data available

Additional information
RTECS: GE7545000

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

Cycloheximide
Acute oral Toxicity
Rat LD50: 2mg/kg

Skin Corrosion/Irritation
Skin-rabbit Result: Skin irritation: 24 h

Germ cell mutagenicity
Lab experiments have shown mutagenic effects.
Invitro tests showed mutagenic effects.

Reproductive toxicity
May cause congenital malformation in the fetus.
Presumed human reproductive toxicant.
Liver-irregularities-based on human evidence.

Additional Information
RTECS:MA4375000

2-Phenyl ethanol
Acute oral toxicity
Rat LD50: 2,230 mg/kg

Acute inhalation toxicity
No data available

Acute dermal toxicity
Rabbit LD50: >300-2,000 mg/kg

Skin irritation
Rabbit Result: Non Irritant

Eye irritation
Rabbit Result: Irritant

Sensitisation
Patch test
Human Result: Negative
Ames test
Result: Negative
Mutagenicity (mammal cell test)
No data available
Carcinogenicity
No data available
Toxicity to Reproduction
No data available
Teratogenicity
No data available

Additional information:
RTECS: SG7175000

12 Ecological Information
12.1 Toxicity
No data available
Components
Manganese sulphate
Toxicity to Fish
Onchorhynchus mykiss (Rainbow trout) LC50: 14.5 mg/l; 96 h
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)

Component:
2-Phenyl ethanol
Toxicity to fish
Leuciscus idus (Golden orfe) LC50: 220 - 460 mg/l; 96 h
Toxicity to daphnia and other aquatic invertebrates
Daphnia magna (Water flea) EC50: 287 mg/l; 48 h
Toxicity to algae
Desmodesmus subspicatus (green algae) IC50: 490 mg/l; 72 h
Toxicity to bacteria
Pseudomonas putida EC50: 1,320 mg/l; 17 h

12.2 Persistence and degradability
No data available
12.3 Bioaccumulative potential
No data available
12.4 Mobility in soil
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
H300  Fatal if swallowed
H302  Harmful if swallowed
H311  Toxic in contact with skin
H315  Causes skin irritation
H318  Causes serious eye damage
H319  Causes serious eye irritation
H335  May cause respiratory irritation
H341  Suspected of causing genetic defects
H360D  May damage the unborn child
H373  May cause damage to organs through prolonged or repeated exposure
H411  Toxic to aquatic life with long lasting effects
Acute Tox. dermal. 3  Acute toxicity, dermal, Category 3
Acute Tox. oral 1,2  Acute toxicity, oral, Category 1, 2
Acute Tox. oral 4  Acute toxicity, oral, Category 4
Aquatic Chronic 2  Hazardous to the aquatic environment, long term hazard, Category 2
Eye Dam. 1  Serious eye damage or eye irritation, Category 1
Eye Irrit. 2A  Serious eye damage or eye irritation, Category 2A
Muta. 2  Germ cell mutagenicity, Category 2
Repr. 1B  Reproductive toxicity, Category 1B
Skin Irrit. 2  Skin corrosion or irritation, Category 2
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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