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

1.1  Product Identifiers

<table>
<thead>
<tr>
<th>Product Number</th>
<th>M342</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Name</td>
<td>Algae Culture Broth</td>
</tr>
<tr>
<td>REACH Registration Number</td>
<td>This product is a mixture. Reach registration number is not available for this mixture.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Produced by</th>
<th>HiMedia Laboratories Private Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>23, Vadhani Industrial Estate, LBS Marg, Ghatkopar (W), Mumbai - 400 086</td>
</tr>
<tr>
<td>India</td>
<td></td>
</tr>
<tr>
<td>Tel. No.</td>
<td>+91-22-2500 0970, +91-22-2500 1607</td>
</tr>
<tr>
<td>Fax No.</td>
<td>+91-22-25002468</td>
</tr>
<tr>
<td>Mail Id</td>
<td><a href="mailto:info@himedialabs.com">info@himedialabs.com</a></td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.himedialabs.com">www.himedialabs.com</a></td>
</tr>
</tbody>
</table>

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]**

- Oxidising solids, (Category 3), H272
- Skin corrosion or irritation, (Category 2), H315
- Serious eye damage or eye irritation, (Category 2A), H319
- Specific target organ toxicity, single exposure, Respiratory tract irritation, (Category 3), H335

2.2  Label elements

**Labeling according to Regulation (EC) No.1272/2008**

<table>
<thead>
<tr>
<th>Pictogram</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Statement(s)</td>
<td></td>
</tr>
<tr>
<td>H272</td>
<td>May intensify fire; oxidizer</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
</tbody>
</table>

Precautionary Statement(s)
P210. Keep away from heat/sparks/open flames/hot surfaces.
P220 Keep/Store away from clothing/combustible materials.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352 IF ON SKIN: wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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>Sodium nitrate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=50.0 - &lt;=60.0%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>7631-99-4</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>231-554-3</td>
<td></td>
</tr>
<tr>
<td>Ammonium chloride</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=1.0 - &lt;=10.0%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>12125-02-9</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>235-186-4</td>
<td></td>
</tr>
<tr>
<td>Index-No :</td>
<td>017-014-00-8</td>
<td></td>
</tr>
<tr>
<td>Calcium chloride, anhydrous</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=1.0 - &lt;=10.0%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>10043-52-4</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>233-140-8</td>
<td></td>
</tr>
<tr>
<td>Ferric chloride</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 - &lt;=1.0%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>7705-08-0</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>231-729-4</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 with plenty of soap and 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
Sodium oxides, Nitrogen oxides (NOx), Oxides of phosphorus, Potassium oxides, Magnesium oxide, Sulphur oxides, Hydrogen chloride gas, 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 absorbent material. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see Section 13.
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.

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.

Physical and chemical properties

9.1 Information on basic physical and chemical properties
Appearance
White to light yellow coloured homogeneous
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
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

**Sodium nitrate**

*Acute Oral Toxicity*
Mouse LD50: 3500 mg/kg
Rabbit LD50: 2680 mg/kg
Rat LD50: 1267 mg/kg

*Acute Inhalation Toxicity*
Rat LC50: 5.5 mg/l; 4 h

**Additional Information**
RTECS: WC5600000

**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: BP45500000

**Calcium chloride**  
*Acute oral toxicity*  
Rat LD50: 1,000 mg/kg  
(As per IUCLID)  
*Acute dermal toxicity*  
Rat LD50: 2,630 mg/kg  
(As per IUCLID)  
*Skin irritation*  
Rabbit  
Result: No irritation  
(As per OECD Test Guideline 404)  
*Eye irritation*  
Rabbit  
Result: Eye irritation  
(As per OECD Test Guideline 405)  
Causes serious eye irritation.

**Additional Information**
RTECS: EV9800000

**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)*  
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
12 Ecological Information

12.1 Toxicity
No data available for this mixture

Components
Sodium nitrate
Toxicity to Fish
Oncorhynchus mykiss LC50 : 994.4 - 1107 mg/L; 96h
Lepomis macrochirus LC50: 2000 mg/L; 96h

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
Calcium chloride
Toxicity to fish
Lepomis macrochirus (Bluegill sunfish) LC50 : 10,650 mg/l; 96 h
(As per IUCLID)
Toxicity to daphnia and other aquatic invertebrates
Daphnia magna (Water flea) EC50 : 144 mg/l; 48 h
(As per IUCLID)
Toxicity to algae
Algae IC50 : 3,130 mg/l; 120 h
(As per IUCLID)
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
No data available

12.6 Other adverse effects
No data available

13 Disposal Considerations

13.1 Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of 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


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 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
No data available

16 Other information
Text of H codes and classification mentioned in section 3

- **H272**: May intensify fire; oxidizer
- **H290**: May be corrosive to metals
- **H302**: Harmful if swallowed
- **H315**: Causes skin irritation
- **H318**: Causes serious eye damage
- **H319**: Causes serious eye irritation
- **H335**: May cause respiratory irritation
- **Acute Tox. oral 4**: Acute toxicity, oral, Category 4
- **Eye Dam. 1**: Serious eye damage or eye irritation, Category 1
- **Eye Irrit. 2A**: Serious eye damage or eye irritation, Category 2A
- **Met. Corr. 1**: Corrosive to metals, Category 1
- **Ox. Sol. 3**: Oxidising solids, Category 3
- **Skin Irrit. 2**: Skin corrosion or irritation, Category 2
- **STOT SE 3**: Specific target organ toxicity, single exposure, Respiratory tract

Further Information

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