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

1.1  Product Identifiers

Product Number: GM1721
Product Name: Azotobacter Broth (Glucose), Granulated
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>Ferrous sulphate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.01 - &lt;=0.1%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit.</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>2A H302; H315; H319</td>
<td></td>
</tr>
<tr>
<td>Index-No :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular Formula :</td>
<td>FeSO₄</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
   Sodium oxides, Sulphur oxides, Hydrogen chloride gas, Magnesium oxides, Iron oxides, Potassium oxides, Oxides of phosphorus
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
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 beige granulated medium
- **Odour**: No data available
- **Odour Threshold**: No data available
- **pH**: 7.40 - 7.80
- **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 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**
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
Ferrous sulphate
Acute Oral Toxicity
Mouse LD50: 1.520 mg/kg

Additional Information
RTECS: NO8510000

12 Ecological Information
12.1 Toxicity
No data available

Components
Ferrous sulphate
Toxicity to fish
Brook trout (Salvelinus fontinalis) LC 50: 0.41 mg/l ; 96h
Toxicity to daphnia and other aquatic invertebrates
Water flea (Daphnia magna) EC 50:6.15 mg/l;48h

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

H302 Harmful if swallowed
H315 Causes skin irritation
H319 Causes serious eye irritation
Acute Tox.oral 4 Acute toxicity, oral, Category 4
Eye Irrit. 2A Serious eye damage or eye irritation, Category 2A
Skin Irrit. 2 Skin corrosion or irritation, Category 2

Further Information

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The information given in this safety data sheet is believed to be correct yet does not claim to be all inclusive. This document is intended only as a guide for appropriate precautionary handling of the material by properly trained individuals, information here being commensurate with the present state of our knowledge regarding the manner and conditions of use, handling, storage or disposal. The information provided herein shall not be considered as guarantee of the properties of the product. HiMedia Laboratories, shall not be held liable for any damage resulting from improper handling or contact with the above product. Unless explicitly stated on the product or in any of the documentation accompanying the product, it is intended for research or testing purpose only and is not to be used for any other purpose.