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

1.1 Product Identifiers
Product Number  M1101
Product Name  M-Bismuth Sulphite 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>Ferrous sulphate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 - &lt;=1.0%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>Acute Tox. oral 4; Skin Irrit. 2; Eye Irrit. 2A H302; H315; H319</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index-No :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular Formula :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FeSO₄</td>
<td></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>Brilliant green</td>
<td>CAS No.: 633-03-4</td>
<td>As Per EC Regulation 1272/2008</td>
</tr>
<tr>
<td></td>
<td>EC No.: 211-190-1</td>
<td>Acute Tox. oral 4; Eye Irrit. 2A H302; H319</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;=0.01 - &lt;=0.1%</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, Oxides of phosphorus, Sodium 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 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.

*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>Light yellow to greenish yellow coloured homogenous 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>7.50 - 7.90</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**
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

*Ferrous sulphate*

*Acute Oral Toxicity*
Mouse LD50: 1.520 mg/kg

*Additional Information*
RTECS: NO8510000

*Brilliant Green*

*Acute oral toxicity*
Rat LD50: 410 mg/kg.

*Subacute to chronic toxicity*
Target organs: respiratory system, gastrointestinal, eyes and skin.

*Acute inhalation toxicity*
Symptoms: Possible damages; mucosal irritations

*Acute Dermal toxicity*
No Data Available

**Skin irritation**
Rabbit Result: slight irritation

**Eye irritation**
Rabbit Result: Eye irritation
Causes serious eye irritation.

**Sensitisation**
No Data Available

**Additional Information:**
RTECS: BP6825000

---

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
Copyright 2016 HiMedia Laboratories Pvt. Ltd.
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.