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

1.1 Product Identifiers
Product Number  M1085
Product Name    Modified Differential Clostridial 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
Mail Id        info@himedialabs.com
Fax No.        +91-22-2500 2468
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]
Serious eye damage or eye irritation, (Category 2A), H319

2.2 Label elements
Labeling according to Regulation (EC) No.1272/2008

Pictogram
Signal word   Warning

Hazard Statement(s)
H319          Causes serious eye irritation

Precautionary Statement(s)
P280           Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313    IF eye irritation persists: Get medical advice/attention.

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>L-Cysteine hydrochloride</td>
<td></td>
<td>&gt;=1.0 - &lt;=10.0%</td>
</tr>
<tr>
<td>CAS No. : 52-89-1</td>
<td>As Per EC Regulation 1272/2008 Skin Irr. 2; Eye Irrit. 2A; STOT SE 3 H315; H319; H335</td>
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<td>EC No. : 200-157-7</td>
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<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
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<tbody>
<tr>
<td>Ammonium ferric citrate</td>
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<td>&gt;=1.0 - &lt;=10.0%</td>
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<tr>
<td>CAS No. : 1185-57-5</td>
<td>As Per EC Regulation 1272/2008 Skin Irr. 2; Eye Irrit. 2A; STOT SE 3 H315; H319; H335</td>
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<tr>
<td>EC No. : 214-686-6</td>
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</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium bisulphite</td>
<td></td>
<td>&gt;=1.0 - &lt;=10.0%</td>
</tr>
<tr>
<td>CAS No. : 7631-90-5</td>
<td>As Per EC Regulation 1272/2008 Acute Tox. oral 4; Eye Dam. 1 H302; H318</td>
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<tr>
<td>EC No. : 231-548-0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index-No : 016-064-00-8</td>
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</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resazurin sodium</td>
<td></td>
<td>&gt;=0.001 - &lt;=0.01%</td>
</tr>
<tr>
<td>CAS No. : 62758-13-8</td>
<td>As Per EC Regulation 1272/2008 Skin Irr. 2; Eye Irrit. 2A; STOT SE 3 H315; H319; H335</td>
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</tr>
<tr>
<td>EC No. : 263-718-5</td>
<td></td>
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</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
Unsuitable extinguishing media

5.2 Special hazards arising from the substance or mixture
Carbon oxides, Sodium oxides, Sulphur oxides, Hydrogen chloride gas, Iron oxides, Nitrogen oxides (NOx)

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.

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

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 of 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 yellow 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>6.90 - 7.30</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>
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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
10.2 Chemical stability
No data available
10.3 Possibility of hazardous reactions
10.4 Conditions to avoid
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

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.

Additional Information
RTECS: No data available

11.2 Components
L-Cysteine Hydrochloride
Acute toxicity
Mouse Intravenous LD50: 771 mg/kg
Mouse Intraperitoneal LD50: 1,250 mg/kg
Germ cell mutagenicity
Mouse(male) Result: Negative
Additional Information:
RTECS: HA2275000
Ferric ammonium citrate
**Acute Oral Toxicity**  
Rat LD50: >2000 mg/kg

**Acute Potential Health Effects**

**Skin**  
Contact may cause irritation or rash, particularly with moist skin.

**Eyes**  
May cause eye irritation with redness, tearing, and abrasion.

**Inhalation**  
Inhalation of high concentrations of dust may cause nasal, throat or lung irritation. Symptoms may include coughing and wheezing.

**Ingestion**  
Ingestion can produce gastrointestinal tract irritation with hyper motility, diarrhea.

**Chronic Potential Health Effects**

**Eyes**  
Prolonged eye contact may cause a brownish discoloration of the eyes.

**Skin**  
Prolonged skin contact may cause skin irritation.

**Additional information:**

**RTECS:** GE7540000

**Sodium bisulphite**

**Acute Oral Toxicity**  
Rat LD50: 1420 mg/kg

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

**Acute Dermal Toxicity**  
Rat LD50: > 2000 mg/kg

**Additional Information**

**RTECS:** VZ2000000

12 Ecological Information

12.1 Toxicity  
No data available

**Components**

**Sodium bisulphite**

**Toxicity to Fish**  
Oncorhynchus mykiss LC50 : 215 - 464 mg/L; 96h

**Toxicity to daphnia and other aquatic invertebrates**  
Daphnia magna EC50 : 119 mg/l; 48 h

12.2 Persistence and degradability

12.3 Bioaccumulative potential

12.4 Mobility in soil

12.5 PBT and vPvB assessment

12.6 Other adverse effects
13 Disposal Considerations
13.1 Waste treatments methods
Product
Offer surplus and non-recyclable solutions to a licenced disposal 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

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

15.2 Chemical Safety Assessment

16 Other information
Text of H codes and classification mentioned in section 3
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
Skin Irrit.  2 Skin corrosion or irritation, Category 2
STOT SE 3 Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3

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.