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

1.1 Product Identifiers
Product Number M486
Product Name Hi-Sensitivity Test 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 For InVitro Diagnostic Use

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>
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<td>Cobaltous sulphate</td>
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<tr>
<td>CAS No. :</td>
<td>10124-43-3</td>
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<tr>
<td>Component</td>
<td>Classification</td>
<td>Concentration</td>
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<tr>
<td>--------------------</td>
<td>-----------------------------------------------------</td>
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<td>CAS No. : 7758-98-7</td>
<td>Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit. 2A H302; H315; H319</td>
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<td>EC No. : 231-847-6</td>
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<tr>
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<td>CAS No. : 7720-78-7</td>
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<td>CAS No. : 7446-19-7</td>
<td>Eye Dam. 1; Aquatic Chronic 1 H318; H410</td>
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<td>EC No. : 231-793-3</td>
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<tr>
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<tr>
<td>CAS No. : 7773-01-5</td>
<td>Acute Tox.oral 4; Eye Dam. 1; STOT RE 2; Aquatic Chronic 2 H302; H318; H373; H411</td>
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<tr>
<td>Menadione</td>
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<td>CAS No. : 58-27-5</td>
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<td>L-Cysteine hydrochloride</td>
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<td>CAS No. : 52-89-1</td>
<td>Skin Irrit. 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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<tr>
<td>Nicotinamide</td>
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<td>CAS No. : 98-92-0</td>
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<tr>
<td>EC No. : 202-713-4</td>
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</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
Carbon oxides, Hydrogen chloride gas, Sodium 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
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>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Cream to yellow coloured homogeneous free flowing powder</td>
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<tr>
<td>Odour</td>
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<tr>
<td>Odour Threshold</td>
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<tr>
<td>pH</td>
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<tr>
<td>Melting/freezing point</td>
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<td>Initial boiling point and boiling range</td>
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<tr>
<td>Flash point</td>
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<tr>
<td>Flammability (Solid, gas)</td>
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<td>Vapour pressure</td>
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<td>Relative density</td>
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<td>Water Solubility</td>
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<td>Partition coefficient: n-octanol/water</td>
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<td>Autoignition Temperature</td>
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<td>Viscosity</td>
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<tr>
<td>Explosive properties</td>
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<tr>
<td>Oxidizing properties</td>
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<td>Vapour density</td>
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<tr>
<td>Thermal decomposition</td>
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</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
Zinc Sulphate, Heptahydrate
Acute Oral Toxicity
Rat LD50: 1,260 mg/kg (As Per RTECS)
Additional information
RTECS: ZH5300000

**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
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

Components
Zinc Sulphate, Heptahydrate
Toxicity to fish
Oncorhynchus mykiss (rainbow trout) LC50: 0.1 mg/l; 96 h
(As Per ECOTOX Database)

Toxicity to algae
Scenedesmus quadricuada (green algae) IC50: 0.52 mg/l; 5 d
(As Per IUCLID)

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

H290 May be corrosive to metals
H302 Harmful if swallowed
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H318 Causes serious eye damage.
H319 Causes serious eye irritation
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 May cause respiratory irritation
H341 Suspected of causing genetic defects
H350i May cause cancer by inhalation
H360F May damage fertility
H373 May cause damage to organs through prolonged or repeated exposure
H410 Very toxic to aquatic life with long lasting effects
H411 Toxic to aquatic life with long lasting effects
Acute Tox.oral 4 Acute toxicity, oral, Category 4
Aquatic Chronic 1 Hazardous to the aquatic environment, long term hazard, Category 1
Aquatic Chronic 2 Hazardous to the aquatic environment, long term hazard, Category 2
Carc. 1A Carcinogenicity, Category 1A
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
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muta. 2</td>
<td>Germ cell mutagenicity, Category 2</td>
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<tr>
<td>Repr. 1A</td>
<td>Reproductive toxicity, Category 1A</td>
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<tr>
<td>Resp. Sens. 1</td>
<td>Sensitisation, respiratory, Category 1</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion or irritation, Category 2</td>
</tr>
<tr>
<td>Skin Sens. 1</td>
<td>Sensitisation, Skin, Category 1</td>
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<tr>
<td>STOT RE 2</td>
<td>Specific target organ toxicity, repeated exposure, Category 2</td>
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<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3</td>
</tr>
</tbody>
</table>

**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.