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

1.1 Product Identifiers
Product Number M1588
Product Name Basal Mineral Medium
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. +91-22-2500 2468
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]
Acute toxicity, Oral, (Category 4), H302
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)
H302 Harmful if swallowed
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>
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<td>Ammonium chloride</td>
<td>As Per EC Regulation 1272/2008</td>
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<td>CAS No. : 12125-02-9</td>
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<td>Index-No : 017-014-00-8</td>
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<tr>
<td></td>
<td>As Per EC Directive 67/548/EEC or 1999/45/EC</td>
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<tr>
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<td>Ferrous sulphate, heptahydrate</td>
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<td>Component</td>
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<tr>
<td>----------------------------------------------</td>
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<td>Copper sulphate pentahydrate</td>
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<td>CAS No. : 7758-99-8</td>
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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, Sulphur oxides, Magnesium oxides, Iron oxides, Calcium oxide, Oxides of phosphorus, Potassium oxides, Nitrogen oxides (NOx), Manganese/manganese oxides, Hydrogen chloride gas

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
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.

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<tr>
<th>9</th>
<th>Physical and chemical properties</th>
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<tr>
<td>9.1</td>
<td>Information on basic physical and chemical properties</td>
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<td>Information on toxicological effects</td>
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No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
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

**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

**Chronic exposure**
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.

**Signs and Symptoms of Exposure**
No data available

**Potential Health Effects**

**Inhalation**
May be harmful if inhaled. May cause respiratory tract irritation.

**Skin**
May be harmful if absorbed through skin. May cause skin irritation.

**Eyes**
Causes eye irritation.

**Ingestion**
Harmful if swallowed

**Ferrous Sulphate, Heptahydrate**

*Acute Oral Toxicity*
Rat LC50: 319 mg/kg

**Additional Information**
RTECS: NO8510000

**Boric Acid**

*Acute Toxicity*
Rat oral LD50: 2660 mg/kg
Rabbit dermal LD50: 2000 mg/kg
Mouse Oral: LD50 = 3450 mg/kg.

**Additional information**
RTECS: ED4550000
Specific concentration limits (SCL): >5.5%
Boric acid is included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)

**Manganese sulphate**

*Acute oral toxicity*
Rat LD50: 2150 mg/kg
(As per IUCLID)

*Acute Dermal Toxicity*
Rat LD50: Not determined.

*Acute Inhalation Toxicity*
Rat LC50: > 4.45 mg/l
(As per OECD Test Guideline 403)

**Additional Information**
RTECS: OP1050000

**Zinc Sulphate, Heptahydrate**

*Acute Oral Toxicity*
Rat LD50: 1,260 mg/kg (As Per RTECS)

Additional information
RTECS: ZH5300000

**Ammonium chloride**

*Toxicity to fish*
LC50 Oncorhynchus mykiss (rainbow trout): 42.91 mg/l; 96 h (ECHA)
LC50 Cyprinus carpio (Carp): 209.00 mg/l - 96 h.
LC50 Oncorhynchus mykiss (rainbow trout): 3.98 mg/l - 96 h.
NOEC Oncorhynchus mykiss (rainbow trout): 57 mg/l - 96 h.

*Toxicity to daphnia and other aquatic invertebrates*
EC50 Daphnia magna (Water flea): > 100 mg/l; 48 h (ECHA)
LC50 - Daphnia magna (Water flea): 161 mg/l - 48 h.
Growth inhibition NOEC - Daphnia magna (Water flea): 0.1 mg/l; 216 h

Toxicity to algae
Static test EC50 Chlorella vulgaris (Fresh water algae): 1,300 mg/l; 5 d (ECHA)

Toxicity to bacteria
Static test EC50 activated sludge: 1,310 mg/l; 0.5 h.
(OECD Test Guideline 209)

Toxicity to fish (Chronic toxicity)
Flow-through test EC10 Lepomis macrochirus (Bluegill sunfish): 4.28 mg/l; 30 d (ECHA)

Additional Information
RTECS: BP4550000

12 Ecological Information
12.1 Toxicity
No data available

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:
Ferrous Sulphate, heptahydrate
Toxicity to fish
Poecilia reticulata (guppy) LC50: 925 mg/l; 96 h (As Per IUCLID)
Toxicity to daphnia and other aquatic invertebrates
Daphnia magna (Water flea) EC50: 152 mg/l; 48 h (anhydrous substance) (As Per IUCLID)
Toxicity to bacteria
Pseudomonas fluorescens EC50: 100 mg/l; 24 h (anhydrous substance) (As Per IUCLID)

Component
Boric Acid
Toxicity to fish
Gambusia affinis LC50: 5600 mg/l
Rainbow trout LC50: 150mg B/L; 24d
Goldfish LC50: 46mg; 7d
*Toxicity to daphnia and other aquatic invertebrates*
Daphnia EC50: 115 mg/l

**Component:**

**Copper sulphate**
*Toxicity to fish*
Oncorhynchus mykiss Flow through test LC50: 200 µg/L; 96h
*Toxicity to aquatic invertebrates*
Daphnia magna (Water flea) Static test LC50: 7 µg/L; 48h
*Toxicity to aquatic alga and cyanobacteria*
Phaeodactylum tricornutum Static test EC10: 2.9 µg/L; 72h
*Toxicity to terrestrial arthropods*
Folsomia fimetaria EC10: 688mg/kg; 21d

**Components**

**Manganese sulphate**
*Toxicity to fish*
Oncorhynchus mykiss (Rainbow trout) LC50: 14.5 mg/l; 96h.
Pimephales promelas (fathead minnow) LC50: 30.6 mg/l; 96 h.
*Toxicity to daphnia and other aquatic invertebrates*
Daphnia magna (Water flea) EC50: 8.3 mg/l; 48 h.
*Acute Toxicity to Aquatic Plants*
Desmodesmus subspicatus (algae) EC50: 61 mg/l; 72 h
(As per OECD Test Guideline 201)

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 quadricuad (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 preparation contains no substance considered to be persistent, bioaccumulating or toxic (PBT) at levels of 0.1% or higher.

12.6 Other adverse effects

---

Page 9 of 11
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
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
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
H341 Suspected of causing genetic defects
H350i May cause cancer by inhalation
H360 May damage fertility or the unborn child
H410 Very 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
Carc. 1B Carcinogenicity, Category 1B
Eye Dam. 1 Serious eye damage or eye irritation, Category 1
Eye Irrit. 2A Serious eye damage or eye irritation, Category 2A
Muta. 2 Germ cell mutagenicity, Category 2
Ox. Liq. 2 Oxidising liquids, Category 2
Repr. 1B Reproductive toxicity, Category 1B
Repr. Tox. 1A, 1B Reproductive toxicity, Category 1A, 1B
Resp. Sens. 1 Sensitisation, respiratory, Category 1
Skin Irrit. 2 Skin corrosion or irritation, Category 2
Skin Sens. 1 Sensitisation, Skin, Category 1
R22 Harmful if swallowed.
R36 Irritating to eyes.
Xi Irritant
Xn Harmful

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.