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

1.1 Product Identifiers
Product Number M723
Product Name Inorganic Salt Medium (Modified Raggios Medium)
REACH Registration Number This product is a mixture. Reach registration number is not available for this substance.

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

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
### Composition/Information On Ingredients

#### 3.2 Mixture

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium chloride, 6H2O</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=10.0 - &lt;=20.0%</td>
</tr>
<tr>
<td>CAS No. : 7774-34-7</td>
<td>Eye Irrit. 2A H319</td>
<td></td>
</tr>
<tr>
<td>Potassium iodide</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.01 - &lt;=0.1%</td>
</tr>
<tr>
<td>CAS No. : 7681-11-0</td>
<td>Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit. 2A H302; H315; H319</td>
<td></td>
</tr>
<tr>
<td>EC No. : 231-659-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boric acid</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.01 - &lt;=0.1%</td>
</tr>
<tr>
<td>CAS No. : 10043-35-3</td>
<td>Repr.Tox. 1A, 1B H360</td>
<td></td>
</tr>
<tr>
<td>EC No. : 233-139-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index-No : 005-007-00-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manganese sulphate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 - &lt;=1.0%</td>
</tr>
<tr>
<td>CAS No. : 10034-96-5</td>
<td>STOT RE 2; Aquatic Chronic 2 H373; H411</td>
<td></td>
</tr>
<tr>
<td>EC No. : 232-089-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index-No : 025-003-00-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc sulphate heptahydrate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.01 - &lt;=0.1%</td>
</tr>
<tr>
<td>CAS No. : 7446-20-0</td>
<td>Acute Tox.oral 4; Eye Dam. 1; Aquatic Chronic 1 H302; H318; H410</td>
<td></td>
</tr>
<tr>
<td>EC No. : 231-793-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index-No : 030-006-00-9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Refer Section 16 for complete statement of H codes and its classification.

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### 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

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 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>White to Light yellow 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>No data available</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>
</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
Strong oxidizing agents

10.6 Hazardous decomposition products
No data available

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

Additional Information
RTECS: No data Available

11.2 Components
Calcium chloride
Acute oral toxicity
Rat LD50: 1,000 mg/kg
(As per IUCLID)
Acute dermal toxicity
Rat LD50: 2,630 mg/kg
(As per IUCLID)
Skin irritation
Rabbit
Result: No irritation
(As per OECD Test Guideline 404)
Eye irritation
Rabbit
Result: Eye irritation
(As per OECD Test Guideline 405)
Causes serious eye irritation.

Additional Information
RTECS: EV9800000

Potassium iodide
Acute oral toxicity
Rat LD50:3118mg/kg; (As Per OECD Test Guideline 401)
Acute intravenous toxicity
Rat LD50: 285mg/kg
Skin irritation
No data available
Eye irritation
No data available
Sensitisation
No data available
Genetic toxicity(in-vitro)
Mammalian cell micronucleus test
Result:Negative
Genetic toxicity(in-vivo)
Rat Chromosome aberration assay
Result:Negative
Carcinogenicity
Rat
Not carcinogenic(As per OECD guideline 453)
**Teratogenicity**

Rat
No developmental toxicity/teratogenicity (ECHA)

**Additional information:**

RTECS: TT2975000

---

**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: 2,150 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

---

12 **Ecological Information**

12.1 **Toxicity**

No data available for this mixture

**Components**

**Calcium chloride**

*Toxicity to fish*

Lepomis macrochirus (Bluegill sunfish) LC50: 10,650 mg/l; 96 h

(As per IUCLID)

*Toxicity to daphnia and other aquatic invertebrates*

Daphnia magna (Water flea) EC50: 144 mg/l; 48 h
Toxicity to algae
Algae IC50: 3,130 mg/l; 120 h
(As per IUCLID)

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 quadricuadua (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
No data available

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 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)
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
H302 Harmful if swallowed
H315 Causes skin irritation
H318 Causes serious eye damage
H319 Causes serious eye irritation
H360 May damage fertility or the unborn child
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
Eye Dam. 1 Serious eye damage or eye irritation, Category 1
Eye Irrit. 2A Serious eye damage or eye irritation, Category 2A
Repr. Tox. 1A, 1B Reproductive toxicity, Category 1A, 1B
Skin Irrit. 2 Skin corrosion or irritation, Category 2
STOT RE 2 Specific target organ toxicity, repeated exposure, Category 2

Further Information
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