

**1 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  
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**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

| Component                           | Classification  | Concentration    |
|-------------------------------------|---|------------------|
| Calcium chloride, 6H <sub>2</sub> O |   |                  |
| CAS No. : 7774-34-7                 | <b>As Per EC Regulation 1272/2008</b><br>Eye Irrit. 2A H319 | >=10.0 - <=20.0% |

| Component                                 | Classification   | Concentration   |
|---|--|-----------------|
| Potassium iodide                          |  |                 |
| CAS No. : 7681-11-0<br>EC No. : 231-659-4 | <b>As Per EC Regulation 1272/2008</b><br>Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit. 2A H302; H315; H319 | >=0.01 - <=0.1% |

| Component   | Classification   | Concentration   |
|---|--|-----------------|
| Boric acid  |  |                 |
| CAS No. : 10043-35-3<br>EC No. : 233-139-2<br>Index-No : 005-007-00-2 | <b>As Per EC Regulation 1272/2008</b><br>Repr.Tox. 1A, 1B H360 | >=0.01 - <=0.1% |

| Component   | Classification   | Concentration  |
|---|--|----------------|
| Manganese sulphate  |  |                |
| CAS No. : 10034-96-5<br>EC No. : 232-089-9<br>Index-No : 025-003-00-4 | <b>As Per EC Regulation 1272/2008</b><br>STOT RE 2; Aquatic Chronic 2 H373; H411 | >=0.1 - <=1.0% |

| Component  | Classification  | Concentration   |
|--|---|-----------------|
| Zinc sulphate heptahydrate   |   |                 |
| CAS No. : 7446-20-0<br>EC No. : 231-793-3<br>Index-No : 030-006-00-9 | <b>As Per EC Regulation 1272/2008</b><br>Acute Tox.oral 4; Eye Dam. 1; Aquatic Chronic 1 H302; H318; H410 | >=0.01 - <=0.1% |

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

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**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

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**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.

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**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.

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## 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.

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## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|   |  |
|---|--|
| Appearance                              | White to Light yellow homogenous free flowing powder |
| Odour                                   | No data available                                    |
| Odour Threshold                         | No data available                                    |
| pH                                      |  |
| Melting/freezing point                  | No data available                                    |
| Initial boiling point and boiling range | No data available                                    |
| Flash point                             | No data available                                    |
| Flammability (Solid, gas)               | No data available                                    |

|  |                   |
|--|-------------------|
| Vapour pressure                        | No data available |
| Relative density                       | No data available |
| Water Solubility                       | No data available |
| Partition coefficient: n-octanol/water | No data available |
| Autoignition Temperature               | No data available |
| Viscosity                              | No data available |
| Explosive properties                   | No data available |
| Oxidizing properties                   | No data available |
| Vapour density                         | No data available |
| Thermal decomposition                  | No data available |

## 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

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## **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

(As per IUCLID)

*Toxicity to algae*

AlgaeIC50 : 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 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**

No data available

## **12.6 Other adverse effects**

No data available

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## **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.

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## **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

|                   |  |
|-------------------|--|
| 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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