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

1.1 Product Identifiers

Product Number: MCD2002
Product Name: Fraser HiCynth™ Broth w/ Supplements
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.: +91-22-25002468
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>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium chloride</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=1.0 - &lt;=10.0%</td>
</tr>
<tr>
<td>CAS No.:</td>
<td>Acute Tox. oral 4; Eye Irrit. 2A; STOT SE 3; Skin Irrit. 2</td>
<td></td>
</tr>
<tr>
<td>EC No.:</td>
<td>H302; H319; H335; H315</td>
<td></td>
</tr>
</tbody>
</table>
### Component Classification Concentration

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nalidixic acid</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.01 - &lt;=0.1%</td>
</tr>
<tr>
<td>CAS No.: 389-08-2</td>
<td>Acute Tox. oral 4</td>
<td></td>
</tr>
<tr>
<td>EC No.: 206-864-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acriflavine hydrochloride (Trypaflavin)</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.01 - &lt;=0.1%</td>
</tr>
<tr>
<td>CAS No.: 8063-24-9</td>
<td>Acute Tox. oral 4; Eye Dam. 1; Aquatic Chronic 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>H302; H318; H411</td>
<td></td>
</tr>
<tr>
<td>Ferric ammonium citrate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 - &lt;=1.0%</td>
</tr>
<tr>
<td>CAS No.: 1185-57-5</td>
<td>Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3</td>
<td></td>
</tr>
<tr>
<td>EC No.: 214-686-6</td>
<td>H315; H319; H335</td>
<td></td>
</tr>
</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 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, nitrogen oxides (NOx), Hydrogen chloride gas, Sodium oxides, Oxides of phosphorus, Potassium oxides, Lithium oxides

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>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>7.00 - 7.40</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>
</tr>
<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
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
Lithium chloride
Acute oral toxicity
Rat LD50: 526 mg/kg (As per RTECS)

Acute inhalation toxicity
Rat LC50: >5.57 mg/l; 4 h; aerosol
(As per OECD Test Guideline 403)

Acute dermal toxicity
Rat LD50: >2.000 mg/kg
(As per OECD Test Guideline 403)

Skin irritation
Rabbit
Result: Irritation (As per IUCLID)

Eye irritation
Rabbit
Result: Eye irritation (As per IUCLID)

Germ cell mutagenicity

Genotoxicity in vitro

Ames test
Result: Negative

Additional Information:
RTECS: OJ5950000

Acriflavine Hydrochloride

Acute Oral Toxicity
Rat LD50: 1,048 mg/kg

Skin corrosion/irritation
Skin-Rabbit
Result: No irritation

Serious eye damage/eye irritation
Rabbit: Causes serious eye irritation

Additional information
RTECS: No data available
Causes cardiovascular effects, Central nervous system depression, Respiratory disorders

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  
**Nalidixic acid**  
**Acute Oral Toxicity**  
Rat LD50: 2040 mg/kg  
Mouse LD50 :572 mg/kg  
**Acute Intraperitoneal Toxicity**  
Rat LD50 : 319 mg/kg  
Mouse LD50: 600 mg/kg  
**Acute Intravenous Toxicity**  
Rat LD50 :1160 mg/kg  
Mouse LD50: 101 mg/kg  
**Acute Dermal Toxicity**  
Rat LD50: 1584 mg/kg  
Mouse LD50 : 500 mg/kg  
**Additional Information**  
RTECS: QN2885000

---

12  
12.1  
Ecological Information  
Toxicity  
No data available  

**Components:**  
**Lithium Chloride**  
Toxicity to Fish  
LC50 Oncorhynchus mykiss (rainbow trout): 158 mg/l; 96 h  
(Static test, As per OECD Test Guideline 203)  
Toxicity to Daphnia  
EC50 Daphnia magna (water flea): 249 mg/l; 48 h  
(Static test, As per OECD Test Guideline 202)  
Toxicity to Algae  
EC50 Desmodesmus subspicatus (green algae):  
Static test > 400 mg/l; 72 h  
(Static test, As per OECD Test Guideline 201)  
**Components**  
Acriflavine hydrochloride
Toxicity to Fish
Leuciscus idus (Golden orfe) LC50: 1 - 10 mg/l; 48 h
Bluegill/Sunfish LC50: 13.5 mg/l; 48 h
Rainbow trout LC50: 19.9 mg/l; 48 h

Ammonium Ferric Citrate
Eco toxicity
No data available.

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 : ADR : IATA_C : IATA_P : IMDG : RID :
Not dangerous goods
Not dangerous goods
Not dangerous goods
Not dangerous goods
Not dangerous goods
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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
<tr>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects</td>
</tr>
<tr>
<td>Acute Tox. oral 4</td>
<td>Acute toxicity, oral, Category 4</td>
</tr>
<tr>
<td>Aquatic Chronic 2</td>
<td>Hazardous to the aquatic environment, long term hazard, Category 2</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage or eye irritation, Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage or eye irritation, Category 2A</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion or irritation, Category 2</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3</td>
</tr>
</tbody>
</table>

Further Information

Copyright 2016 HiMedia Laboratories Pvt. Ltd.
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.