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

1.1 Product Identifiers

Product Number: MV2002
Product Name: Fraser HiVeg™ 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 - &lt;=10%</td>
</tr>
<tr>
<td>CAS No.:</td>
<td>Acute Tox.oral 4; Eye Irrit. 2A; STOT SE 3; Skin Irrit. 2</td>
<td>H302; H319; H335; H315</td>
</tr>
<tr>
<td>EC No. :</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Component</td>
<td>Classification</td>
<td>Concentration</td>
</tr>
<tr>
<td>----------------------------</td>
<td>------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Ferric ammonium citrate</td>
<td>[EC No.: 1185-57-5, EC No.: 214-686-6] As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 - &lt;=1%</td>
</tr>
<tr>
<td>Nalidixic acid</td>
<td>[EC No.: 389-08-2, EC No.: 206-864-7] As Per EC Regulation 1272/2008</td>
<td>&gt;=0.001 - &lt;=0.01%</td>
</tr>
<tr>
<td>Acriflavine hydrochloride</td>
<td>[EC No.: 8063-24-9] As Per EC Regulation 1272/2008</td>
<td>&gt;=0.001 - &lt;=0.01%</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, Hydrogen chloride gas, Sodium oxides, Oxides of phosphorus, Iron 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 89/686/EEC and the standard EN 374 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
Appearance
Cream to yellow coloured homogeneous free flowing powder
Odour
No data available
Odour Threshold
No data available
pH
7.00 - 7.40
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
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. Other Decomposition products not known.

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: >2000 mg/kg
(As per OECD Test Guideline 403)

Skin irritation
Rabbit
Result: Irritations (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

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

**Acriflavine Hydrochloride**

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

**Skin corrosion/irritation**
Skin - Rabbit
Result: No irritation

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Irritation
Causes serious eye irritation

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

---

**12 Ecological Information**

**12.1 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)

**Ammonium Ferric Citrate**

**Eco toxicity**
Components
Acriflavine hydrochloride

Toxicity to Fish
Leuciscus idus (Golden orfe) LC50: 10 mg/l; 48 h
Bluegill/Sunfish LC50: 13.5 mg/l; 48 h
Rainbow trout LC50: 19.9 mg/l; 48 h

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 licensed company. Contact a licensed professional waste disposal service to dispose of 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

H302   Harmful if swallowed
H315   Causes skin irritation
H318   Causes serious eye damage
H319   Causes serious eye irritation
H335   May cause respiratory irritation
H411   Toxic to aquatic life with long lasting effects
Acute Tox. oral 4    Acute toxicity, oral, Category 4
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
Resp. Sens. 1    Sensitisation, respiratory, Category 1
Skin Irrit. 2    Skin corrosion or irritation, Category 2
STOT SE 3    Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3

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.