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

1.1 Product Identifiers
Product Number       MV839
Product Name         Dubos Oleic HiVeg™ Broth Base
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
For InVitro Diagnostic Use

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
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>Ferric ammonium citrate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAS No.:</td>
<td>1185-57-5</td>
<td></td>
</tr>
<tr>
<td>EC No.:</td>
<td>214-686-6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 - &lt;=1.0%</td>
</tr>
<tr>
<td></td>
<td>Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>H315; H319; H335</td>
<td></td>
</tr>
</tbody>
</table>

Page 1 of 10
<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium chloride, anhydrous</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.001 - &lt;=0.01%</td>
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<tr>
<td>CAS No.: 10043-52-4</td>
<td>Eye Irrit. 2A H319</td>
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<tr>
<td>EC No.: 233-140-8</td>
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<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc sulphate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.001 - &lt;=0.01%</td>
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<tr>
<td>CAS No.: 7446-19-7</td>
<td>Eye Dam. 1; Aquatic Chronic 1 H318; H410</td>
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<tr>
<td>EC No.: 231-793-3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper sulphate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.001 - &lt;=0.01%</td>
</tr>
<tr>
<td>CAS No.: 7758-98-7</td>
<td>Acute Tox. oral 4; Skin Irrit. 2; Eye Irrit. 2A; Aquatic Chronic 1 H318; H319; H410</td>
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</tr>
<tr>
<td>EC No.: 231-847-6</td>
<td>As Per EC Directive 67/548/EEC or 1999/45/EC Xn; Xi; N R22; R36/38; R50/53</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, Iron oxides, Calcium oxide, Hydrogen chloride gas, Zinc/zinc oxides, Copper oxides, Sulphur 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 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.

### Physical and chemical properties

#### Information on basic physical and chemical properties

- **Appearance**: Light yellow coloured homogeneous free flowing powder
- **Odour**: No data available
- **Odour Threshold**: No data available
- **pH**: 6.40 - 6.80
- **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

#### 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

**Ferric ammonium citrate**

*Acute Oral Toxicity*
RatLD50: >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

**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

**Zinc Sulphate, Heptahydrate**

*Acute Oral Toxicity*
Rat LD50: 1,260 mg/kg (As Per RTECS)
Additional information
RTECS: ZHS000000

**Copper sulphate**
*Acute oral toxicity*
Rat LD50: 482 mg/kg
*Acute dermal toxicity*
Rat LD50: >2000 mg/kg
*Skin irritation*
Rabbit Result: Non irritant
*Eye irritation*
Rabbit Result: Highly irritating
*Skin sensitization*
Guinea pig Result: Non sensitizing
*Genetic toxicity (in-vitro)*
Ames test
Result: Negative (As Per OECD Test Guideline 471)
*Genetic toxicity (in-vivo)*
Mouse Micronucleus assay
Result: Negative
*Carcinogenicity*
Rat Result: Negative
*Toxicity to Reproduction*
No data available
*Teratogenicity*
No data available

**Additional information:**
RTECS: GL8800000

---

12 **Ecological Information**
12.1 **Toxicity**
No data available

**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*
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 quadricuada (green algae) IC50: 0.52 mg/l; 5 d
(As Per IUCLID)

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

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 or 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 : 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
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
Eye Dam. 1 Serious eye damage or eye irritation, Category 1
Eye Irrit. 2A Serious eye damage or eye irritation, Category 2A
Skin Irrit. 2 Skin corrosion or irritation, Category 2
STOT SE 3 Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3
R22 Harmful if swallowed.
R36/38 Irritating to eyes and skin.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
N Dangerous for the environment
Xi Irritant
Xn Harmful
Further Information

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