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

1.1  Product Identifiers

<table>
<thead>
<tr>
<th>Product Number</th>
<th>S022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Name</td>
<td>Methylene Blue (Loeffler's)</td>
</tr>
<tr>
<td>REACH Registration Number</td>
<td>This product is a mixture. Reach registration number is not available for this mixture.</td>
</tr>
</tbody>
</table>

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 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]
Flammable liquids, (Category 3), H226

2.2  Label elements

Labeling according to Regulation (EC) No.1272/2008

Pictogram
Signal word Warning

Hazard Statement(s)

H226 Flammable liquid and vapour

Precautionary Statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P233 Keep container tightly closed.
P370 + P378 In case of fire: Use suitable extinguishing media for extinction.

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>Methylene blue</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 - &lt;=1.0%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>7220-79-3</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>200-515-2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute Tox. oral 4; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>H302; H315; H319; H335</td>
<td></td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=20.0 - &lt;=40.0%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>64-17-5</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>200-578-6</td>
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<tr>
<td>Index-No :</td>
<td>603-002-00-05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flam. Liq. 2; Eye Irrit. 2A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>H225; H319</td>
<td></td>
</tr>
</tbody>
</table>

Refer Section 16 for complete statement of H codes & 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.

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**
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**: Dark blue coloured clear solution
- **Odour**: No data available
- **Odour Threshold**: No data available
- **pH**: No data available
- **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
10.5 **Incompatible materials**  
Peroxides

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

*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

11.2 **Components**

*Methylene blue*

*Acute oral toxicity*
Rat LD50: 1,180mg/kg

*Acute inhalation toxicity*
No data available.

*Acute dermal toxicity*
No data available.
Skin irritation
No data available.
Eye irritation
No data available.
Sensitisation
No data available.
Germ cell mutagenicity
No data available.
Carcinogenicity
No data available.
Reproductive toxicity
No data available.
Teratogenicity
No data available.

Additional information:
RTECS: SP5740000

Ethanol (Ethyl alcohol)

Acute oral toxicity
Rat LD50: 10,470 mg/kg
(As Per OECD Test Guideline 401)

Acute inhalation toxicity
Rat LC50: 124.7 mg/l; 4 h;Vapour
(As Per OECD Test Guideline 403)

Acute dermal toxicity
No data available

Skin irritation
Rabbit Result: Non Irritant
(As Per OECD Test Guideline 404)

Eye irritation
Rabbit Result: Eye irritation
(As Per OECD Test Guideline 405)

Sensitisation
Result: Negative
(As Per IUCLID)

Ames test
Salmonella Typhimurium
Result: Negative
(As Per OECD Test Guideline 471)

Additional information:
RTECS: KQ6300000
12 Ecological Information

12.1 Toxicity
No data available

Components:
Methylene blue
Toxicity to fish
Pimephales promelas (fathead minnow) LC50: 45 mg/l; 96 h
Toxicity to daphnia and other aquatic invertebrates
Daphnia magna (Water flea) EC50: 2,260 mg/l; 48 h

Component:
Ethanol (Ethyl alcohol)
Toxicity to fish
Leuciscus idus (Golden orfe) LC50: 8,140 mg/l; 48 h
(As Per IUCLID)
Pimephales promelas (fathead minnow) LC50: 14,200 mg/l; 96h
Toxicity to daphnia and other aquatic invertebrates
Daphnia magna (Water flea)EC50: 9,268-14,221 mg/l; 48h
(As Per IUCLID)
Daphnia magna (Water flea) NOEC: 9.6 mg/l; 9d
Toxicity to algae
Scenedesmus quadricauda (Green algae)IC50: 5,000 mg/l; 7d
Chlorella vulgaris (Fresh water algae) EC50: 275 mg/l; 72h
(As Per OECD Test Guideline 201)
Toxicity to bacteria
Pseudomonas putida EC50: 6,500 mg/l; 16 h
(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
This preparation contains no substance considered to be persistent, bioaccumulating or toxic (PBT) at levels of 0.1% or higher.

12.6 Other adverse effects
Discharge into the environment must be avoided.

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

14.2 UN proper shipping name
ADNR : Flammable liquids, n.o.s.
ADR : Flammable liquids, n.o.s.
IATA_C : Flammable liquids, n.o.s.
IATA_P : Flammable liquids, n.o.s.
IMDG : Flammable liquids, n.o.s.
RID : Flammable liquids, n.o.s.

14.3 Transport hazard class(es)
ADNR : 3 ADR : 3 IATA_C : 3 IATA_P : 3 IMDG : 3 RID : 3

14.4 Packaging group

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
H225 Highly flammable liquid and vapour
H302 Harmful if swallowed
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation
Acute Tox. oral 4 Acute toxicity, oral, Category 4
Eye Irrit. 2A Serious eye damage or eye irritation, Category 2A
Flam. Liq. 2 Flammable liquids, Category 2
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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