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

1.1 Product Identifiers

- **Product Number**: R037
- **Product Name**: Fehling Solution No. 1
- **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 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]**

Hazardous to the aquatic environment, long term hazard, (Category 1), H410

2.2 Label elements

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

- **Pictogram**
- **Signal word**: Warning
- **Hazard Statement(s)**
  - **H410**: Very toxic to aquatic life with long lasting effects
- **Precautionary Statement(s)**
  - **P273**: Avoid release to the environment.
  - **PS01A**: Dispose of contents in accordance with local regional/national/international regulations.

2.3 Other Hazards
3 Composition/Information On Ingredients

<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 Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit. 2A; Aquatic Chronic 1 H302; H315; H319; H410</td>
<td>&gt;=5 - &lt;=10%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>7758-98-7</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>231-847-6</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
Sulphur oxides, Borane/boron oxides, Copper 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 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

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; Face shield (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**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Light blue coloured clear solution.</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>No data available</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

**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

**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
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 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
ADNR : 3082  ADR : 3082  IATA_C : 3082  IATA_P : 3082  IMDG : 3082  RID : 3082

14.2 UN proper shipping name

ADNR : Environmentally hazardous substance, liquid, n.o.
ADR : Environmentally hazardous substance, liquid, n.o.
IATA_C : Environmentally hazardous substance, liquid, n.o.
IATA_P : Environmentally hazardous substance, liquid, n.o.
IMDG : Environmentally hazardous substance, liquid, n.o.
RID : Environmentally hazardous substance, liquid, n.o.

14.3 Transport hazard class(es)

ADNR : 9  ADR : 9  IATA_C : 9  IATA_P : 9  IMDG : 9  RID : 9

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

H302  Harmful if swallowed
H315  Causes skin irritation
H319  Causes serious eye 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 Irrit. 2A  Serious eye damage or eye irritation, Category 2A
Skin Irrit. 2  Skin corrosion or irritation, Category 2
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.