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

1.1 **Product Identifiers**
- Product Number: RM1471
- Product Name: Tiron, Hi-AR™
- CAS No.: 149-45-1
- EC No.: 205-741-5

1.2 **Relevant identified uses of the substance or mixture and uses advised against**

1.2.1 Relevant identified uses: Laboratory chemicals, Manufacture of substances

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.: +91-22-2500 2468
- 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

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2. **Hazards Identification**

2.1 **Classification of the substance or mixture**

**CLP Classification-Regulation (EC) No. 1272/2008[EU-GHS/CLP]**
- Skin corrosion or irritation, (Category 2), H315
- Serious eye damage or eye irritation, (Category 2A), H319
- Specific target organ toxicity, single exposure, Respiratory tract irritation, (Category 3), H335

2.2 **Label elements**

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

<table>
<thead>
<tr>
<th>Pictogram</th>
<th>Signal word</th>
<th>Precautionary Statement(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>Warning</td>
<td>P261 Avoid breathing dust/fume/gas/mist/ vapours/spray.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
</tr>
</tbody>
</table>
2.3 Other Hazards
None

3 Composition/Information On Ingredients

3.1 Substances

Synonym: 4,5-Dihydroxy-1,3-benzenedisulfonic acid disodium salt
Molecular Formula: C₆H₄O₈S₂Na₂
Molecular Weight: 314.2
CAS No.: 149-45-1
EC No.: 205-741-5

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiron, Hi-AR™</td>
<td>As Per EC Regulation 1272/2008</td>
<td></td>
</tr>
<tr>
<td>CAS No. :</td>
<td>149-45-1</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>205-741-5</td>
<td>100%</td>
</tr>
</tbody>
</table>

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
Do NOT induce vomiting. 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
The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

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
5.2 **Special hazards arising from the substance or mixture**
Carbon oxides, Sulphur oxides, Sodium 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. Discharge into environment must be avoided.

6.3 **Methods and materials for containment and cleaning up**
Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). 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**

7.2 **Conditions for safe storage, including any incompatibilities**
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

*Recommended Storage Temperature*: Below 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*
Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

*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*
Faceshield and safety goggles.
Skin protection
Handle with gloves.

Body protection
Complete suit protecting against chemicals.

Respiratory protection
Air-purifying respirators.

Environment exposure controls
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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>White to brown or grey 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>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>Upper/lower flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation rate</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>Decomposition 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
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
Incompatible material

10.5 Incompatible materials
10.6 **Hazardous decomposition products**
Other decomposition products - refer section 5.2.
In the event of fire - refer section 5.

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

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS : CZ9263000

12 **Ecological Information**

12.1 **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**
PBT and vPvB assessment not available Chemical safety assessment is not required
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 licensed disposal company. Dissolve or mix the material with a combustive solvent and burn in chemical incinerator equipped with an afterburner and scrubber.

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 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-Statements and EUH-Phrases mentioned in section 3
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation
Skin Irrit. 2 Skin corrosion or irritation, Category 2
Eye Irrit. 2A Serious eye damage or eye irritation, Category 2A
STOT SE 3 Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3

Further Information

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