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

1.1 Product Identifiers
Product Number: RM4113
Product Name: (1S)-(+) - Camphor-10-sulphonic acid
CAS No.: 3144-16-9
EC No.: 221-554-1

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.: +91-22-25002468
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]
Skin corrosion or irritation, (Category 1B), H314

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

Pictogram
Signal word: Danger
Hazard Statement(s)
H314 Causes severe skin burns and eye damage
Precautionary Statement(s)
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.

2.3 Other Hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
3 Composition/Information On Ingredients

3.1 Substances
Molecular Formula: $C_{10}H_{16}O_4S$
Molecular Weight: 232.30
CAS No.: 3144-16-9
EC No.: 221-554-1

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
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<tbody>
<tr>
<td>(1S)-(+)-Camphor-10-sulphonic acid</td>
<td>As Per EC Regulation 1272/2008</td>
<td>100%</td>
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</table>

<table>
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<tr>
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<th>Classification</th>
<th>Concentration</th>
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<tr>
<td>CAS No.: 3144-16-9</td>
<td>Skin Corr. 1B H314</td>
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<tr>
<td>EC No.: 221-554-1</td>
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<td></td>
</tr>
</tbody>
</table>

For the full text of the H-Statements and classification mentioned in this Section, see Section 16.

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
No data available.

5.2 Special hazards arising from the substance or mixture
Carbon 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. 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
Avoid contact with skin and eyes. Avoid inhalation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2

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

- **Appearance**: White to beige crystals or powder
- **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
- **Upper/lower flammability or explosive limits**: No data available
- **Evaporation rate**: 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
- **Decomposition 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

- Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

#### 10.4 Conditions to avoid

#### 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 : ED1550000

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 : 2585  ADR : 2585  IATA_C : 2585  IATA_P : 2585  IMDG : 2585  RID : 2585

14.2 UN proper shipping name

<table>
<thead>
<tr>
<th>ADNR</th>
<th>Alkyl sulfonic acids, solid or Aryl sulfonic acid</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>Alkyl sulfonic acids, solid or Aryl sulfonic acid</td>
</tr>
<tr>
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<td>RID</td>
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</tr>
</tbody>
</table>

14.3 Transport hazard class(es)

| ADNR     | 8 |
| ADR      | 8 |
| IATA_C   | 8 |
| IATA_P   | 8 |
| IMDG     | 8 |
| RID      | 8 |

14.4 Packaging group

| ADNR     | III |
| ADR      | III |
| IATA_C   | III |
| IATA_P   | III |
| IMDG     | III |
| RID      | III |

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
Other information
Text of H-Statements and EUH-Phrases mentioned in section 3

H314  Causes severe skin burns and eye damage
Skin Corr. 1B  Skin corrosion or irritation, Category 1B

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.