1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Methane Sulphonic anhydride
Synonyms: None
Company Identification: Sisco Research Laboratories Pvt. Ltd.
Andheri (East), Mumbai – 400 099.
Tel: +91 22 2687 2601
Fax: +91 22 2687 8241
Website: www.srlchem.com

2 - COMPOSITION, INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>%</th>
<th>EINECS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>7143-01-3</td>
<td>Methanesulphonic anhydride</td>
<td>97%</td>
<td>230-442-1</td>
</tr>
</tbody>
</table>

3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Reacts violently with water. Causes burns.

Potential Health Effects
Eye: Causes eye burns.
Skin: Causes skin burns.
Ingestion: Causes gastrointestinal tract burns.
Inhalation: Causes chemical burns to the respiratory tract.
Chronic:

4 - FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.
### 5 - FIRE FIGHTING MEASURES

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:** Use foam, dry chemical, or carbon dioxide. DO NOT USE WATER!

### 6 - ACCIDENTAL RELEASE MEASURES

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Do not expose spill to water. Do not let this chemical enter the environment.

### 7 – HANDLING AND STORAGE

**Handling:** Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Do not allow contact with water. Use only in a chemical fume hood.

**Storage:** Store in a cool, dry place. Store in a tightly closed container. Corrosives area. Store protected from moisture.

### 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

**CAS# 7143-01-3:**

**Personal Protective Equipment**

- **Eyes:** Wear chemical splash goggles.
- **Skin:** Wear appropriate protective gloves to prevent skin exposure.
- **Clothing:** Wear appropriate protective clothing to prevent skin exposure.
- **Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### 9 - PHYSICAL AND CHEMICAL PROPERTIES

- **Physical State:** Solid
- **Melting Point:** 68 - 70 deg C
- **Molecular Formula:** $C_2H_6O_5S_2$
- **Molecular Weight:** 174.20
### 10 - STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Chemical Stability:</th>
<th>Moisture sensitive.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditions to Avoid:</td>
<td>Incompatible materials, exposure to moist air or water.</td>
</tr>
<tr>
<td>Incompatibilities with Other Materials:</td>
<td>Strong oxidizing agents, strong bases.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products:</td>
<td>Carbon monoxide, oxides of sulfur, carbon dioxide.</td>
</tr>
<tr>
<td>Hazardous Polymerization:</td>
<td>Has not been reported.</td>
</tr>
</tbody>
</table>

### 11 - TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>RTECS#:</th>
<th>CAS# 7143-01-3: None listed</th>
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</thead>
<tbody>
<tr>
<td>LD50/LC50:</td>
<td>RTECS: Not available.</td>
</tr>
<tr>
<td>Carcinogenicity:</td>
<td>Methanesulfonic anhydride - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.</td>
</tr>
<tr>
<td>Other:</td>
<td>The toxicological properties have not been fully investigated.</td>
</tr>
</tbody>
</table>

### 12 - ECOLOGICAL INFORMATION

| Other: | Do not empty into drains. |

### 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

### 14 - TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>Shipping Name:</th>
<th>IATA</th>
<th>IMO</th>
<th>RID/ADR</th>
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</thead>
<tbody>
<tr>
<td>Hazard Class:</td>
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<td>8</td>
<td>8</td>
</tr>
<tr>
<td>UN Number:</td>
<td>3261</td>
<td>3261</td>
<td>3261</td>
</tr>
<tr>
<td>Packing Group:</td>
<td>II</td>
<td>II</td>
<td>II</td>
</tr>
</tbody>
</table>

### 15 - REGULATORY INFORMATION

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

| Hazard Symbols: | C |
| Risk Phrases: | R 14 Reacts violently with water. R 34 Causes burns. |
| Safety Phrases: | S 8 Keep container dry. S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). |

WGK (Water Danger/Protection) CAS# 7143-01-3: Not available
Canada  CAS# 7143-01-3 is listed on Canada's DSL List
US Federal  CAS# 7143-01-3 is listed on the TSCA Inventory.
TSCA  CAS# 7143-01-3 is listed on the TSCA Inventory.

16 - ADDITIONAL INFORMATION

SISCO RESEARCH LABORATORIES provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.