1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Heparin Sodium Salt
Catalog Numbers: 084842
Synonyms: HEPARIN SODIUM
Company Identification: SISCO RESEARCH LABORATORIES PVT. LTD.
2-F, Satam Industrial Estate, ‘C’ Wing, 2nd Floor,
Dr. Cardinal Gracious Road, Chakala,
Andheri (East), Mumbai – 400 099.
Tel : 2687 2601/2687 8163/2687 8243
Fax : 2687 8241
Email : info@srlchem.com, export@srlchem.com
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>9041-08-1</td>
<td>HEPARIN SODIUM</td>
<td></td>
<td>unlisted</td>
</tr>
</tbody>
</table>

3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Hygroscopic (absorbs moisture from the air).
Potential Health Effects
Eye: No information regarding eye irritation and other potential effects was found. Contact may cause transient eye irritation.
Skin: May cause skin irritation.
Ingestion: May cause irritation of the digestive tract. Expected to be a low ingestion hazard.
Inhalation: May cause respiratory tract irritation.
Chronic: No information found.
### 4 - FIRST AID MEASURES

<table>
<thead>
<tr>
<th>Eyes:</th>
<th>Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin:</td>
<td>Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.</td>
</tr>
<tr>
<td>Ingestion:</td>
<td>If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid.</td>
</tr>
<tr>
<td>Inhalation:</td>
<td>Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.</td>
</tr>
</tbody>
</table>

**Notes to Physician:**

### 5 - FIRE FIGHTING MEASURES

<table>
<thead>
<tr>
<th>General Information:</th>
<th>As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dusts at sufficient concentrations can form explosive mixtures with air.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extinguishing Media:</td>
<td>Use water spray, dry chemical, or carbon dioxide.</td>
</tr>
</tbody>
</table>

### 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. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. |
7 – HANDLING AND STORAGE

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Do not breathe dust, vapor, mist, or gas.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits CAS# 9041-08-1:

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

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
Color: white to off-white
Solubility in water: 5% aq.soln is clear and colourless
10 - STABILITY AND REACTIVITY

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials, excess heat, exposure to moist air or water.

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, oxides of nitrogen, oxides of sulfur, carbon dioxide, sodium oxide.

Hazardous Polymerization: Has not been reported.

11 - TOXICOLOGICAL INFORMATION

RTECS#: CAS# 9041-08-1: MI0850000

LD50/LC50: 

CAS# 9041-08-1: 
Oral, mouse: LD50 = >5 gm/kg; Oral, rat: LD50 = >779000 iu/kg;

Carcinogenicity: HEPARIN SODIUM - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information. The toxicological properties have not been fully investigated.

12 - ECOLOGICAL INFORMATION

Other: No information available.

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>
</tr>
</thead>
<tbody>
<tr>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazard Class:</th>
<th>UN Number:</th>
<th>Packing Group:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**15 - REGULATORY INFORMATION**

**European/International Regulations**
European Labeling in Accordance with EC Directives
Hazard Symbols: Not available
Risk Phrases:
Safety Phrases: S 24/25 Avoid contact with skin and eyes.
WGK (Water Danger/Protection) CAS# 9041-08-1: Not available
Canada CAS# 9041-08-1 is listed on Canada's DSL List
US Federal TSCA CAS# 9041-08-1 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.