MATERIAL SAFETY DATA SHEET
N-α-BENZOYL-DL-ARGININE-4-NITROANILIDE HYDROCHLORIDE

1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: N-α-Benzyol-DL-arginine-4-nitroanilide hydrochloride
Synonyms: BAPNA, BANI
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>911-77-3</td>
<td>N-alpha-Benzyol-DL-arginine-4-nitroanilide hydrochloride</td>
<td>98%</td>
<td>213-011-2</td>
</tr>
</tbody>
</table>

3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Not available

Potential Health Effects
Eye: May cause eye irritation.
Skin: May cause skin irritation. May be harmful if absorbed through the skin.
Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.
Inhalation: May cause respiratory tract irritation. May be harmful if inhaled.

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.
Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion: Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Inhalation: Remove from exposure and move to fresh air immediately.
Notes to Physician:

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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

### 6 - ACCIDENTAL RELEASE MEASURES

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

**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal.

### 7 – HANDLING AND STORAGE

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**Storage:** Store in a cool, dry place. Keep container closed when not in use. Keep refrigerated. (Store below 4°C/39°F.)

### 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

**Engineering Controls:** Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

**Exposure Limits**

**Personal Protective Equipment**

**Eyes:** Wear safety glasses and chemical goggles if splashing is possible.

**Skin:** Wear safety glasses and chemical goggles if splashing is possible.

**Clothing:** Wear appropriate protective clothing to minimize contact with skin.

**Respirators:** Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

### 9 - PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Formula:</td>
<td>( \text{C}<em>{19}\text{H}</em>{22}\text{N}_6\text{O}_4\text{HCl} )</td>
</tr>
<tr>
<td>Molecular Weight:</td>
<td>434.89</td>
</tr>
</tbody>
</table>

### 10 - STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Chemical Stability:</th>
<th>Stable under normal temperatures and pressures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditions to Avoid:</td>
<td>Incompatible materials.</td>
</tr>
</tbody>
</table>
Incompatibilities with Other Materials: Strong oxidizing agents.
Hazardous Decomposition Products: Irritating and toxic fumes and gases.
Hazardous Polymerization: Has not been reported.

### 11 - TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>RTECS#</th>
<th>CAS# 911-77-3: None listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50/</td>
<td>RTECS: Not available.</td>
</tr>
<tr>
<td>LC50:</td>
<td>N-alpha-Benzoyl-DL-arginine-P-nitroanilide hydrochloride</td>
</tr>
<tr>
<td></td>
<td>- 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

Not available

### 13 - DISPOSAL CONSIDERATIONS

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

### 14 - TRANSPORT INFORMATION

<table>
<thead>
<tr>
<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>
</tr>
</tbody>
</table>

### 15 - REGULATORY INFORMATION

**European/International Regulations**

European Labeling in Accordance with EC Directives

<table>
<thead>
<tr>
<th>Hazard Symbols:</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Phrases:</td>
<td>S 24/25 Avoid contact with skin and eyes.</td>
</tr>
</tbody>
</table>

**Canada**

| CAS# 911-77-3 is listed on Canada's NDSL List |

**US Federal**

| CAS# 911-77-3 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.