MATERIAL SAFETY DATA SHEET
CARBENICILLIN, Disodium salt

I IDENTIFICATION:
BioShop Canada Inc.
5480 Mainway
Burlington, Ontario L7L 6A4
1-800-234-1179

Emergency Telephone No.: 905-466-3832
Chemical Name: carbenicillin disodium salt
Catalog Number: CAR544
Molecular Formula: C17H16N2O6SNa2
Molecular Weight: 422.4
WHMIS Classification: D2B
TSCA Status: not listed on the TSCA Inventory

II COMPOSITION/INGREDIENTS:

<table>
<thead>
<tr>
<th>CAS #</th>
<th>%</th>
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<tbody>
<tr>
<td>Carbenicillin</td>
<td>4800-94-6</td>
</tr>
<tr>
<td>Disodium salt</td>
<td></td>
</tr>
</tbody>
</table>

III HAZARDS/TOXICOLOGICAL PROPERTIES:

Target Organs: No information found
Eyes: May cause eye irritation.
Skin: May cause skin irritation.
Ingestion: May be harmful if swallowed. May cause irritation.
Inhalation: May cause irritation. May cause allergic reaction.
CHRONIC HEALTH HAZARDS: No information.

Exposure Limits:
LD50 / LC50:
Oral rat: LD50=>10g/kg
ACGIH, NIOSH, OSHA-NOT LISTED

Epidemiology: No data available
Teratogenicity: No data available
Reproductive Effects: No data available
Neurotoxicity: No data available
Mutagenicity: No data available
Carcinogenicity: Not listed by ACGIH, IARC, NTP, or OSHA

IV FIRST AID MEASURES:

Eyes: Flush eyes with plenty of water for at least 15 minutes.
Skin: Flush area immediately with plenty of soap and water while removing contaminated clothing and shoes.
Inhalation: Remove victim to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen and GET MEDICAL ATTENTION.
Ingestion: Wash mouth with water. DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION.

V FIRE AND EXPLOSION HAZARDS:

Flammable: No
Flash Point: N/A
Extinguishing Media: Water, dry chemical, chemical foam or alcohol resistant foam.
Explosion Data: Not available

VI REACTIVITY:

Stability: Stable under normal temperatures and pressure
Conditions to avoid: dust generation
Incompatibility: strong oxidizing reagents
Hazardous Decomposition Products: carbon monoxide, carbon dioxide, nitrogen oxides, oxides of sulfur
Hazardous Polymerization: Will not occur

VII PHYSICAL DATA:

Physical State: Solid
Appearance and Odor: white to off-white, odorless
Melting Point: n/a
Boiling Point: n/a
Specific Gravity: n/a
Vapor Density: n/a
Solubility: Soluble in water
pH: n/a

VIII PREVENTIVE MEASURES:

Personal Protection: Wear appropriate protective gloves and clothes to prevent skin exposure.
Ventilation: Local exhaust systems.
Respiratory protection: Use NIOSH/MSHA approved full face-piece respirator.
Leak and Spill Procedures: Wear appropriate protective equipment. Sweep up then place into a suitable container for disposal.
Waste Disposal: Follow local disposal regulations.
Storage Conditions: Store in a cool, dry place. Store in a tightly closed container.
Label Hazard Warning: Irritating to eyes, respiratory system and skin.
Shipping Information: Not regulated

IX PREPARATION OF MSDS:

Prepared By: M. Kierdelewicz (President)
Date: Mar 2/2015
Phone: (800) 234-1179

The information provided on this Material Safety Data Sheet is furnished in good faith and without warranty of any kind. The above information is believed to be correct and should be used only as a guide. BioShop Canada Inc. shall not be held liable for any damage resulting from the handling or from the contact with the above product.

Observe all federal, provincial and state laws concerning health, safety and pollution.