# MATERIAL SAFETY DATA SHEET

## Section 1. Company Identification and Product Information

<table>
<thead>
<tr>
<th>Product Name or Identity:</th>
<th>Novobiocin Supplement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer’s Name:</td>
<td>Acumedia Manufacturers, Inc.</td>
</tr>
<tr>
<td>Emergency Phone No.:</td>
<td>517/372-9200</td>
</tr>
<tr>
<td>Fax No.:</td>
<td>517/372-0108</td>
</tr>
<tr>
<td>e-mail:</td>
<td><a href="mailto:foodsafety@neogen.com">foodsafety@neogen.com</a></td>
</tr>
<tr>
<td>Date Prepared or Revised:</td>
<td>December 2009</td>
</tr>
</tbody>
</table>

Chemtrec: (800) 424-9300
Outside US and Canada: (703) 527-3887

## Section 2. Composition / Information on Hazardous Ingredients

This product is a mixture of the substances listed below with the addition of nonhazardous materials.

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS-No.</th>
<th>%</th>
<th>Hazard Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novobiocin (Sodium Salt)</td>
<td>1476-53-5</td>
<td>54%</td>
<td>Xn (Harmful)</td>
</tr>
</tbody>
</table>

## Section 3. Health Hazard Identification

Health Hazards: (Acute and Chronic)

Information pertaining to particular dangers for man and environment.

R 20 / 22, Harmful by inhalation and if swallowed. R 43, May cause sensitization by skin contact.

## Section 4. First Aid Measures

### Emergency / First Aid Procedures:

- **General Information:** No special measures required.
- **Ingestion:** If swallowed, seek medical attention immediately. Show physician product label or MSDS.
- **Inhalation:** If inhaled, supply fresh air or oxygen. Seek medical attention if breathing becomes labored or difficult.
- **Eye Contact:** Rinse opened eye for at least 15 minutes under running water, lifting lower and upper eyelids occasionally. Seek medical attention.
- **Skin Contact:** Remove contaminated clothing. Immediately wash with plenty of soap and water for at least 15 minutes. Wash clothing before reuse.

## Section 5. Fire and Explosion Hazard Data

- **Flash Point (Method Used):** N/A
- **Flammable Limits:** LEL – N/A
- **UEL – N/A**

- **Extinguishing Media:** Use CO₂, ABC multipurpose dry chemical, or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective Equipment:** Wear self contained breathing apparatus for firefighting if necessary.
- **Unusual Fire and Explosion Hazards:** This product itself does not burn.

## Section 6. Accidental Release Measures

- **Personal Precautions:** Avoid inhalation and skin contact. Wear protective clothing, including gloves.
- **Environmental Precautions:** Prevent dispersion of material. Wipe up with damp sponge or mop. Do not let product enter drains.
- **Clean-up Methods:** Keep in suitable, closed containers for disposal.
Section 7. Handling and Storage

Handling: Protect against physical damage.

Storage: Requirements to be met by storerooms and receptacles: 2 - 8°C
Keep container tightly closed in a dry and well-ventilated place.

Other Precautions: Store away from oxidizing agents.

Section 8. Exposure Controls / Personal Protection

Components with limit values that require monitoring: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

OSHA–PEL: N/A    REL: N/A    TLV: N/A

Additional Information: Personal Protection listed below are general requirements for laboratory personnel. Follow the usual precautionary measures for handling chemicals / powder. Avoid contact with eyes, skin, and clothing.

Personal Protective Equipment:
Keep away from food, beverages, and feed.
Wash hands before and after entering laboratory.

Breathing Equipment: In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respiratory.

Hand Protection: Use chemical resistant gloves.

Eye Protection: Wear safety glasses or goggles.

Body Protection: Wear lab coat or other protective work clothing.

Section 9. Physical and Chemical Properties

Appearance and Odor: White to off-white dried powder, crystalline powder.

Boiling Point: Not determined    Density: Not determined
Flash Point: Not applicable    Melting Point: Not determined
Auto Igniting: Product is not self-igniting    Solubility in Water: Soluble

Section 10. Stability and Reactivity

Stability: Unstable    Stable X

Conditions to Avoid: Stable under recommended storage conditions.

Incompatibility (Materials to Avoid): Incompatible with strong oxidizing agents.

Hazardous Decomposition or Byproducts: Carbon monoxide, Carbon dioxide and Nitrogen oxides.

Hazardous Polymerization: May Occur
Will Not Occur X No dangerous reactions known.

Section 11. Toxicological Information

LD/LC50 values that are relevant:
LD₅₀: ORL-RAT, 3500 mg/kg, Novobiocin Sodium (1476-53-5)

Carcinogenicity Classification:
IARC (International Agency for Research on Cancer) - Not listed
NTP (National Toxicology Program) - Not listed

Irritant: Irritant to eyes, skin, and mucous membranes.

Inhalation: May be harmful if inhaled or absorbed through the skin. May be harmful to the respiratory tract.

Ingestion: May be harmful if swallowed, causing vomiting and diarrhea.

Subacute to chronic toxicity: Target organs: Liver and blood.
**Section 12. Ecological Information**

**Ecotoxicity Tests:**
The ecological effects have not been thoroughly investigated, but currently none have been identified. Not known to be hazardous to water.

**Section 13. Disposal Considerations**

**Waste Disposal Method:** Dispose in accordance with all applicable federal (40 CFR 261.3), state, and local environmental regulations. Smaller quantities can be disposed of with solid waste.

RCRA Hazardous Waste – No
Contact a licensed professional waste disposal service to dispose of this material if questions arise.

**Container Information:** Do not remove labels from containers until they have been cleaned.

**Section 14. Transport Information**

**DOT Regulations:** Not Regulated

**Land Transport ADR/RID (cross-border):** Not Regulated

**Maritime Transport IMDG:** Not Regulated

**Air Transport ICAO-TI and IATA-DGR:** Not Regulated

**Section 15. Regulatory Information**

**EU Regulations, Hazard Symbol(s):**

**Novobiocin (Sodium Salt):** Xn (Harmful)

**Risk Phrases:**
R 20 / 22, Harmful by inhalation and if swallowed.  R 43 May cause sensitization by skin contact.

**Safety Phrases:**
S 7, Keep container tightly closed.
S 22, Do not breathe dust.
S 24/25, Avoid contact with skin and eyes.
S 36, Wear suitable protective clothing.

**Section 16. Other Information**

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Acumedica Manufacturers, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.