



## MATERIAL SAFETY DATA SHEET

| Section I – Product Information           |  |                            |                       |
|---|--|----------------------------|-----------------------|
| <b>Product Name or Identity:</b>          | <b>Buffered Listeria Enrichment Broth Base</b> |                            |                       |
| <b>Manufacturer's Name:</b>               | Acumedia Manufacturers, Inc.                   | <b>Emergency Phone No.</b> | 517/372-9200          |
|   | 740 East Shiawassee                            | <b>Fax No.:</b>            | 517/372-2006          |
|   | Lansing, Michigan 48912                        | <b>e-mail:</b>             | foodsafety@neogen.com |
| <b>Date Prepared or Revised:</b> 10/11/04 |  |                            |                       |

| Section II – Hazardous Ingredients / Identity Information           |   |                                      |                                |
|---|---|--------------------------------------|--------------------------------|
| Hazardous Components:<br>(Specific Chemical Identity: Common Names) | OSHA PEL<br>(Permissible Exposure Limits) | ACGIH TLV<br>(Threshold Limit Value) | Toxicity Data LD <sub>50</sub> |
| Sodium Chloride, NaCl   | N/A                                       | N/A                                  | ORL-RAT, 3000 mg/kg            |
| Sodium Phosphate  | N/A                                       | N/A                                  | ORL-RAT, 17000 mg/kg           |

| Section III – Physical Characteristics  |   |
|---|---|
| <b>Boiling Point:</b> 1413°C (Sodium Chloride)  | <b>Specific Gravity (H<sub>2</sub>O = 1):</b> 2.16 g/cm <sup>3</sup> (Sodium Chloride)<br>1.67 g/cm <sup>3</sup> (Sodium Phosphate) |
| <b>Vapor Pressure (mm Hg.):</b> 1.0 @ 865°C (Sodium Chloride)   | <b>Melting Point:</b> 804°C (Sodium Chloride)<br>240°C (Sodium Phosphate)   |
| <b>Vapor Density (AIR = 1):</b> 4.9 g/l (Sodium Phosphate)  | <b>Evaporation Rate (Butyl Acetate = 1):</b> N/A  |
| <b>Solubility in Water:</b> 35.7 g/100g at 0°C (Sodium Chloride), Soluble (Sodium Phosphate.)   |   |
| <b>Appearance and Odor:</b> Colorless crystals or white powder. Characteristic odor. (Sodium Chloride).<br>White powder (Sodium Phosphate). |   |

| Section IV – Fire and Explosion Hazard Data   |   |
|---|---|
| <b>Flash Point (Method Used):</b> Not applicable  | <b>Flammable Limits:</b> LEL (Lower Explosive Limit) - N/A<br>UEL (Upper Explosive Limit) - N/A |
| <b>Extinguishing Media:</b> Suitable extinguishing agents. CO <sub>2</sub> , extinguishing powder, or water spray.  |   |
| <b>Special Fire Fighting Procedures:</b> Fight larger fires with water or alcohol resistant foam. Firefighters should wear protective equipment and self-contained breathing apparatus. |   |
| <b>Unusual Fire and Explosion Hazards:</b> During heating or in case of fire, poisonous gases are produced.   |   |

| Section V – Reactivity Data  |                |   |  |
|--|----------------|---|--|
| <b>Stability:</b>  | Unstable       |   | Conditions to Avoid: Stable under ordinary conditions of use and storage.<br>Hygroscopic. Protect from moisture. |
|  | Stable         | X |  |
| <b>Incompatibility (Materials to Avoid):</b> Reacts with acids, alkalis, oxidizing agents, Lithium, and Bromine trifluoride. |                |   |  |
| <b>Hazardous Decomposition or Byproducts:</b> When heated to above 801°C it emits toxic fumes of chloride and sodium oxide.  |                |   |  |
| <b>Hazardous Polymerization:</b>   | May Occur      |   | Conditions to Avoid: Incompatible materials.   |
|  | Will Not Occur | X |  |

| Section VI – Health Hazard Data  |   |  |                    |
|--|---|--|--------------------|
| <b>Route(s) of Entry:</b>  | Inhalation? Yes   | Skin? Yes  | Ingestion? Yes     |
| <b>Health Hazards:</b><br>(Acute and Chronic)  | Irritant. Irritating to eyes, respiratory system, and skin.   |  |                    |
| <b>Carcinogenicity:</b>  | NTP? No<br>(National Toxicology Program)  | IARC Monographs? No<br>(International Agency for Research in Cancer) | OSHA Regulated? No |
| <b>Signs and Symptoms of Exposure:</b> Irritant to skin and mucous membranes. Irritating effect to eye. May cause irritation if absorbed through the skin. Sodium Phosphate is a corrosive material and can cause burns. Sensitization possible through skin contact and inhalation. |   |  |                    |
| <b>Medical Conditions Generally Aggravated by Exposure:</b> If ingested, large doses can cause vomiting, diarrhea, and prostration. Chronic exposure of Sodium Phosphate may sequester calcium and cause calcium phosphate deposits in the kidneys.                                  |   |  |                    |
| <b>Emergency / First Aid Procedures:</b>   | Ingestion: If swallowed, seek medical attention.  |  |                    |
|  | Inhalation: Supply fresh air or oxygen. Seek medical attention.   |  |                    |
|  | Eye Contact: Rinse opened eye for at least 15 minutes under running water. Seek medical attention.              |  |                    |
|  | Skin Contact: Wash with plenty of soap and water for 15 minutes. Seek medical attention if irritation develops. |  |                    |

| Section VII – Precautions for Safe Handling and Use  |  |
|--|--|
| <b>Accidental Release Measures:</b> Ventilate spill area. Wear suitable protective clothing. Wipe up with damp sponge or mop. Avoid inhalation, contact with eyes, skin, and clothing. |  |
| <b>Waste Disposal Method:</b> Dispose in accordance with all applicable federal, state, and local environmental regulations.   |  |
| <b>Handling and Storing:</b> Keep container tightly closed. Protect from moisture. Suitable for any general chemical storage area. Store away from oxidizing agents.                   |  |
| <b>Other Precautions:</b> Prevent formation of dust. Ensure good ventilation / exhaustion at the workplace. Avoid prolonged or repeated exposure.                                      |  |

| Section VIII – Control Measures   |                             |   |
|---|-----------------------------|---|
| <b>Respiratory Protection</b> (Specify Type): None required where adequate ventilation conditions exist. If airborne concentration is high, use an appropriate respirator or dust mask.   |                             |   |
| <b>Ventilation:</b>   | Local Exhaust: 50 – 100 CFM | Special: N/A                                      |
|   | Mechanical (General): N/A   | Other: N/A  |
| <b>Protective Gloves:</b> Proper disposable gloves  |                             | Eye Protection: Chemical resistant safety goggles |
| <b>Other Protective Clothing or Equipment:</b> Uniform, lab coat, or disposable lab wear.   |                             |   |
| <b>Work / Hygienic Practices:</b> Follow the usual precautionary measures for handling chemicals / powder. Keep away from food and beverages. Immediately remove all soiled and contaminated clothing. Avoid contact with eyes, skin, and clothing. |                             |   |

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