Product # (s) 7526

# MATERIAL SAFETY DATA SHEET

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

| Section II – Hazardous Ingredients / Identity Information | | | |
|---|---|---|---|
| **Hazardous Components:** (Specific Chemical Identity: Common Names) | **OSHA PEL** (Permissible Exposure Limits) | **ACGIH TLV** (Threshold Limit Value) | **Toxicity Data $LD_{50}$** |
| Sodium Chloride, NaCl, Common salt | N/A | N/A | ORL-RAT, 3000 mg/kg |
| Sodium Metabisulphite | N/A | 5 $mg/m^3$ | N/A |
| Sodium Carbonate | N/A | N/A | ORL-RAT, 4090 mg/kg |
| Sodium Pyruvate, Pyruvate acid sodium salt | N/A | N/A | N/A |

| Section III – Physical Characteristics | |
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| **Boiling Point:** 1413ºC (Sodium Chloride) | **Specific Gravity** ($H_2O$ = 1): 2.16 $g/cm^3$ (Sodium Chloride) 2.53 (Sodium Carbonate) 1.48 (Sodium Metabisulfite) |
| **Vapor Pressure (mm Hg.):** 1.0 @ 865ºC (Sodium Chloride) | **Melting Point:** 804ºC (Sodium Chloride), 851ºC (Sodium Carbonate) 150ºC (Sodium Metabisulfite), >300ºC (Sodium Pyruvate) |
| **Vapor Density** (AIR = 1): N/A | **Evaporation Rate** (Butyl Acetate = 1): N/A |
| **Solubility in Water:** 35.7 g/100g at 0ºC (Sodium Chloride), Soluble (Sodium Pyruvate & Sodium Metabisulphite) 45.5 g/100 mL water @ 100ºC (Sodium Carbonate). | |
| **Appearance and Odor:** Colorless crystals or white powder (Sodium Chloride), White powder, odorless (Sodium Carbonate), Coarse white granules, slight odor of sulfur dioxide (Sodium Metabisulphite), White powder, odorless (Sodium Pyruvate). | |

| Section IV – Fire and Explosion Hazard Data | |
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| **Flash Point** *(Method Used)*: Not applicable | **Flammable Limits:** LEL (Lower Explosive Limit) - N/A UEL (Upper Explosive Limit) - N/A |
| **Extinguishing Media:** Suitable extinguishing agents. $CO_2$, extinguishing powder, or water spray. | |
| **Special Fire Fighting Procedures:** Fight larger fires with water or alcohol resistant foam. Firefighters should wear protective equipment and self-contained breathing apparatus. As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source. | |
| **Unusual Fire and Explosion Hazards:** During heating or in case of fire, poisonous gases are produced. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. | |

| Section V – Reactivity Data | | | |
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| **Stability:** | Unstable | | Conditions to Avoid: Strength diminishes with age. Sodium Metabisulfite gradually decomposes in air to sulfate, generating sulfurous acid gas. Contact with moisture will release toxic sulfur dioxide gas. Hygroscopic. |
| | Stable | X | |
| **Incompatibility** *(Materials to Avoid)*: Reacts with water, acids, alkalis, oxidizing agents, Carbon monoxide (CO), Carbon dioxide ($CO_2$), Lithium, Sodium oxide, and Bromine trifluoride. Sodium Carbonate reacts violently with acids to form $CO_2$. | | | |
| **Hazardous Decomposition or Byproducts:** When heated to above 801°C it emits toxic fumes of chloride and sodium oxide. Burning may produce sulfur oxides. | | | |
| **Hazardous Polymerization:** | May Occur | | Conditions to Avoid: Moisture, heat flames, ignition sources and incompatible materials. |
| | Will Not Occur | X | |

| Section VI – Health Hazard Data | | | |
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| **Route(s) of Entry:** | Inhalation? Yes | Skin? Yes | Ingestion? Yes |
| **Health Hazards:** *(Acute and Chronic)* | Harmful. Harmful if swallowed, inhaled, or absorbed through the skin. Irritating to eyes, respiratory system, and skin. Dust may be irritating to mucous membranes. May cause allergic respiratory reaction. Sodium Carbonate may cause eye burns. | | |
| **Carcinogenicity:** NTP? No (National Toxicology Program) | IARC Monographs? Group 3 (Sodium Metabisulfite) The agent is not classifiable as to carcinogenicity in humans. (International Agency for Research in Cancer) | | OSHA Regulated? No |
| **Signs and Symptoms of Exposure:** Irritant to skin and mucous membranes. Inhalation of powder may cause eyes, skin, and respiratory irritation. Dust may irritate eyes or upper respiratory tract. Ingestion of Sodium Metabisulfite may result in | | | |
| **Medical Conditions Generally Aggravated by Exposure:** May be harmful if inhaled. Ingestion of large doses may cause nausea, vomiting, diarrhea, abdominal pains, and central nervous depression. Skin irritation may cause redness, itching, and pain. Symptoms of eye exposure may include stinging, tearing, redness, swelling, or corneal damage. Some individuals are sensitive to minute amounts of sulfites. Symptoms may include broncho-constriction, shock, gastrointestinal disturbances, and tingling sensations. | | | |
| **Emergency / First Aid Procedures:** | Ingestion: If swallowed, seek medical attention immediately. | | |
| | 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. | | |

| Section VII – Precautions for Safe Handling and Use |
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| **Accidental Release Measures:** Ventilate spill area. Wear suitable protective clothing. Wipe up with damp sponge or mop. |
| **Waste Disposal Method:** Dispose in accordance with all applicable federal, state, and local environmental regulations. |
| **Handling and Storing:** Keep container tightly closed. Protect from moisture and physical damage. Store away from oxidizing agents. |
| **Other Precautions:** Prevent formation of dust. Ensure good ventilation / exhaustion at the workplace. Remove contaminated clothing immediately. Containers of this material may be hazardous when empty since they retain product residues. Avoid prolonged or repeated exposure. |

| Section VIII – Control Measures | | |
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| **Respiratory Protection** (Specify Type): None required where adequate ventilation conditions exist. If airborne concentration is high, use an appropriate respirator or dust mask. | | |
| **Ventilation:** | Local Exhaust: 50 – 100 CFM | Special: N/A |
| | Mechanical (General): N/A | Other: N/A |
| **Protective Gloves:** Proper disposable gloves | | Eye Protection: Chemical resistant safety goggles |
| **Other Protective Clothing or Equipment:** Uniform, lab coat, or disposable lab wear. | | |
| **Work / Hygienic Practices:** 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. | | |