



MATERIAL SAFETY DATA SHEET

Section I – Product Information			
Product Name or Identity:	D/E Neutralizing 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) TWA (ppm/mg/m ³)	Toxicity Data LD ₅₀
Sodium Thiosulfate, Sodium hyposulfite	N/A	N/A	IPR-MUS, 5200 mg/kg
Sodium Thioglycollate	N/A	N/A	ORL-MUS, 504 mg/kg
Sodium Bisulfite, Sodium acid sulfite	N/A	5 mg/m ³	ORL-RAT, 2000 mg/kg

Section III – Physical Characteristics	
Boiling Point: 7100°C (Sodium Thiosulfate)	Specific Gravity (H₂O = 1): 1.48 g/cm ³ (Sodium Bisulfite) 1.69 g/cm (Sodium Thiosulfate)
Vapor Pressure (mm Hg.): N/A	Melting Point: >100°C (Sodium Thiosulfate), 150°C (Sodium Bisulfite) 300°C (Sodium Thioglycollate)
Vapor Density (AIR = 1): N/A	Evaporation Rate (Butyl Acetate = 1): N/A
Solubility in Water: 50g/100 ml of water at 4°C (Sodium Thiosulfate), Very soluble in water (Sodium Bisulfite)	
Appearance and Odor: Colorless crystals, odorless. (Sodium Thiosulfate) Coarse white granules with slight odor of sulfur dioxide, (Sodium Bisulfite)	

Section IV – Fire and Explosion Hazard Data	
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.	
Unusual Fire and Explosion Hazards: During heating or in case of fire, poisonous gases (sulfur dioxide) are produced. Closed containers exposed to heat may explode.	

Section V – Reactivity Data			
Stability:	Unstable		Conditions to Avoid: Keep away from heat and light. Decomposed by heat; reduces to ferrous salt by light. Stability limited in solution. Sodium Bisulfite will release toxic sulfur dioxide gas if contact is made with moisture.
	Stable	X	
Incompatibility (Materials to Avoid): Danger of explosion. Incompatible with strong acids, oxidizers, sodium nitrate, halogens, iodine and mercury.			
Hazardous Decomposition or Byproducts: Carbon monoxide (CO), Carbon dioxide (CO ₂), Chlorine (Cl), Sulfur oxides (SO _x), Ammonia (NH ₄) and Nitrogen oxides (NO _x). Reacts with acids to release sulfur dioxide.			
Hazardous Polymerization:	May Occur		Conditions to Avoid: Moisture, heat, flames, ignition sources and incompatibles.
	Will Not Occur	X	

Section VI – Health Hazard Data			
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. May cause allergic respiratory reaction. Irritating to eyes, respiratory system and skin.		
Carcinogenicity: NTP? No (National Toxicology Program)	IARC Monographs? Group 3 (Sodium Bisulfite) 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. Irritating effect to eye. This product contains sulfites. People with known or suspected allergies to sulfite should use appropriate safety precautions when handling, especially asthmatics. A severe allergic reaction may be fatal. If ingested, may cause gastric irritation by the liberation of sulfurous acid.			
Medical Conditions Generally Aggravated by Exposure: Sensitization possible through inhalation. If inhaled, coughing and shortness of breath may result. Contact with skin or eyes may cause severe irritation or burns. Symptoms may include redness, itching, and pain.			
Emergency / First Aid Procedures:	Ingestion: If swallowed, seek medical attention immediately.		
	Inhalation: Supply fresh air or oxygen, seek medical attention. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.		
	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 at least 15 minutes. Seek medical attention.		

Section VII – Precautions for Safe Handling and Use
Accidental Release Measures: Wear suitable protective clothing. Ventilate area away from sources of heat, moisture and incompatibilities. Flush spill area with water, wipe up with damp sponge or mop. Remove contaminated clothing.
Waste Disposal Method: Dispose in accordance with all applicable federal, state, and local environmental regulations.
Handling and Storing: Keep container tightly closed, in a cool, dry ventilated area. Protect from moisture. Protect container from physical damage. Store away from oxidizing agents. Do not store together with acids.
Other Precautions: Prevent formation of dust. Ensure good ventilation / exhaustion at the workplace. Containers of this material may be hazardous when empty since they retain product residues. Prevent repeated or prolonged exposure.

Section VIII – Control Measures		
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.		

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