



## MATERIAL SAFETY DATA SHEET

Section I – Product Information			
<b>Product Name or Identity:</b>	Bismuth Sulfite Agar		
<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>	10/10/04		

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 <sub>50</sub>
Sodium Sulfite	TWA 5 ppm	N/A	ORL RAT, 820 mg/kg
Sodium Phosphate	N/A	N/A	ORL-RAT, 17000 mg/kg
Bismuth Ammonium Citrate	N/A	N/A	N/A

Section III – Physical Characteristics	
<b>Boiling Point:</b> N/A	<b>Specific Gravity (H<sub>2</sub>O = 1):</b> 2.63 g/cm (Sodium Sulfite) 1.67 g/cm (Sodium Phosphate)
<b>Vapor Pressure (mm Hg.):</b> N/A	<b>Melting Point:</b> 48°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> 1M completely soluble at 20°C (Sodium Sulfite), Soluble (Sodium Phosphate)	
<b>Appearance and Odor:</b> White crystals, odorless (Sodium Sulfite), Colorless or white, odorless (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 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. Heat and moisture contribute to instability. May air-oxidize.
	Stable	X	
<b>Incompatibility (Materials to Avoid):</b> Strong acids, bases, strong oxidizing agents and high temperatures.			
<b>Hazardous Decomposition or Byproducts:</b> Phosphorous oxides and Sodium oxides. Burning may produce Sulfur oxides.			
<b>Hazardous Polymerization:</b>	May Occur		Conditions to Avoid: Heat, moisture, dust generation, exposure to air, and incompatible materials.
	Will Not Occur	X	

Section VI – Health Hazard Data			
<b>Route(s) of Entry:</b>	Inhalation? N/A	Skin? N/A	Ingestion? N/A
<b>Health Hazards:</b> (Acute and Chronic)	Harmful. Harmful if swallowed, inhaled, or absorbed through skin. May cause allergic reaction and breathing difficulties to sensitive individuals. May cause irritation to skin, eyes, and respiratory tract.		
<b>Carcinogenicity:</b>	NTP? No (National Toxicology Program)	IARC Monographs? Group 3 (Sodium Sulfite) The agent is not classifiable as to carcinogenicity in humans. (International Agency for Research in Cancer)	OSHA Regulated? No
<b>Signs and Symptoms of Exposure:</b> Inhalation of dust may cause irritation to the mucous membranes of the upper respiratory tract. May cause gastric irritation by the liberation of sulfurous acid. May cause irritation, redness, and pain to the eye. Large doses may result in circulatory disturbances, diarrhea, and central nervous system depression. Effects may be delayed. Sodium Phosphate is a corrosive material and cause burns.			
<b>Medical Conditions Generally Aggravated by Exposure:</b> Although only moderately toxic in large amounts, sulfites can pose risk to some asthmatics producing central nervous system depression, bronchconstriction and anaphylaxis. Sodium Phosphate causes mild skin irritation, but if ingested can cause gastrointestinal irritation. 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 immediately.		
	Inhalation: Supply fresh air or oxygen. In case of unconsciousness, place patient on side position for transportation. Seek medical attention.		
	Eye Contact: Rinse opened eye for at least 15 minutes under running water. Seek medical attention.		
	Skin Contact: Immediately wash with plenty of soap and water for at least 15 minutes. Seek medical attention.		

Section VII – Precautions for Safe Handling and Use
<b>Accidental Release Measures:</b> Ventilate area and wash spill site after material is picked up and evacuated. Wear protective clothing, and discard after use. Exercise appropriate precautions to minimize direct contact with skin or eyes. Prevent inhalation of dust.
<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 physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture, and incompatibilites. Containers of this material may be hazardous when empty since they retain product residues.
<b>Other Precautions:</b> Air and moisture sensitive. Do not breathe dust. Avoid contact with eyes, skin, and clothing. Ensure good ventilation / exhaustion at the workplace. Avoid prolonged or repeated exposure.

Section VIII – Control Measures		
<b>Respiratory Protection (Specify Type):</b> None required where adequate ventilation conditions exist.		
<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		<b>Eye Protection:</b> 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 associated with inert powders. Keep away from food and beverages. Immediately remove all soiled and contaminated clothing. Avoid contact with eyes, skin, and clothing.		

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