



# MATERIAL SAFETY DATA SHEET

## Section 1. Company Identification and Product Information

<b>Product Name or Identity:</b>	m-Endo Agar		
<b>Manufacturer's Name:</b>	Acumedia Manufacturers, Inc.	<b>Emergency Phone No.:</b>	517/372-9200
	740 East Shiawassee	<b>Fax No.:</b>	517/372-0108
	Lansing, Michigan 48912	<b>e-mail:</b>	foodsafety@neogen.com
<b>Date Prepared or Revised:</b>	December 2007		

## Section 2. Composition / Information on Hazardous Ingredients

Hazardous Components Specific Chemical Identity:	CAS-No.	%	EG-Number	Hazard Symbol
Potassium Phosphate	7758-11-4	8.4%	231-834-5	Xi (Irritant)
Sodium Chloride (NaCl)	7647-14-5	7.3%	231-598-3	Xi (Irritant)
Sodium Sulfite	7757-83-7	3.1%	231-821-4	Xn (Harmful)
Basic Fuchsin	569-61-9	1.6%	N/A	T (Toxic)

## Section 3. Health Hazard Identification

<b>Route(s) of Entry:</b>	Inhalation? Yes	Skin? Yes	Ingestion? Yes
<b>Health Hazards:</b> (Acute / Chronic)	TOXIC. May be toxic 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. Basic Fuchsin is a possible carcinogen.		
<b>Carcinogenicity:</b>	IARC Monographs? <b>Sodium Sulfite, Group 3</b> - The agent is not classifiable as to carcinogenicity in humans. <b>Basic Fuchsin, Group 2B</b> - The agent is possibly carcinogenic to humans.		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 eyes. Large doses may result in circulatory disturbances, diarrhea, and central nervous system depression. Phosphates are slowly and incompletely absorbed when ingested. The toxicity of phosphates is their ability to sequester calcium.			
<b>Medical Conditions Generally Aggravated by Exposure:</b> Moderately toxic in large amounts, sulfites can pose risk to some asthmatics producing central nervous system depression, bronchconstriction, and anaphylaxis. Significant symptoms of exposure can persist and be activated by a variety of nonspecific environmental stimuli. Basic Fuchsin is a possible carcinogen. Chronic exposure of laboratory experiments have shown teratogenic effects.			

## Section 4. First Aid Measures

<b>Emergency / First Aid Procedures:</b>	General Information: Immediately remove contaminated clothing. Show physician product label.
	Ingestion: If swallowed, wash mouth out with water provided person is conscious. Seek medical attention immediately.
	Inhalation: If inhaled, supply fresh air or oxygen. Seek medical attention. If breathing is difficult, give oxygen. In case of unconsciousness, place patient on side position for transportation.
	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. Seek medical attention. Wash clothing before reuse.

## Section 5. Fire and Explosion Hazard Data

<b>Flash Point:</b> Closed Cup: N/A	<b>Flammable Limits:</b> Lower Explosive Limit: N/A	(Upper Explosive Limit): N/A
<b>Extinguishing Media:</b> Use water spray, Carbon dioxide, dry chemical powder, or appropriate foam.		
<b>Special Fire Fighting Procedures:</b> Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Emits toxic fumes under fire conditions. 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. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source, is a potential dust explosion hazard.		

### Section 6. Accidental Release Measures

**Personal Precautions:** Shut off all sources of ignition, ventilate spill area. Consider need for evacuation. Wear suitable protective clothing, gloves, and eye protection. Avoid inhalation and contact with skin and eyes. Wear self-containing breathing apparatus, rubber boots, and heavy rubber gloves. Place contaminated material in a chemical waste container.

**Environmental Precautions:** Prevent dispersion of material. Do not allow to enter drains or water courses.

**Clean-up Methods:** Contact safety officer and ventilate area. Absorb spill with inert material, including dry-lime, sand, or soda ash, then place into a chemical waste container using non-sparking tools. Wash spill site after material pickup is complete.

### Section 7. Handling and Storage

**Handling:** Ensure good ventilation / exhaustion and do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Do not use if skin is cut or scratched.

**Storage:** Keep container tightly closed, protect from light, moist air, and steam. Store away from oxidizing agents. Keep away from heat, sparks, and open flame. Storage area should be cool, dry, and away from incompatible materials. Containers of this material may be hazardous when empty since they retain product residues.

### Section 8. Exposure Controls / Personal Protection

**OES:** N/A

**ACGIH TLV:** N/A

**Engineering Measures:** Do not use compressed air by filling, discharging or handling the product. Proper ventilation, safety shower, and eye bath required. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Respiratory Protection (Specify Type):** Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Proper ventilation, safety shower, and eye bath required.

**Ventilation:** Local Exhaust: 50 – 100 CFM

**Special:** Safety shower and eye wash.

**Protective Gloves:** Compatible chemical-resistant gloves.

**Eye Protection:** Safety glasses or chemical goggles to EN 166, 167, and 168.

**Other Protective Clothing or Equipment:** Uniform, lab coat, or disposable lab wear.

**Work / Hygienic Practices:** Follow the usual precautionary measure for handling chemicals / powder. Keep away from food and beverages. Immediately remove all soiled and contaminated clothing. Avoid contact with eyes, skin, and clothing.

### Section 9. Physical and Chemical Properties

**Boiling Point:** 1413°C (NaCl)

**Specific Gravity:** 2.3 g/cm<sup>3</sup> (Potassium Phosphate), 2.16 (NaCl)  
2.63 g/cm<sup>3</sup> (Sodium Sulfite)

**Vapor Pressure (mm Hg.):** 1.0 @ 865°C (NaCl)

**Melting Point:** > 465°C (Potassium Phosphate), 804°C (NaCl)  
268°C (Basic Fuchsin)

**Vapor Density (AIR = 1):** N/A

**Solubility in Water:** 150 g / 100 g cold water (Potassium Phosphate)  
Soluble (Sodium Sulfite), 35.7 g / 100 g at 0°C (NaCl)

**Appearance and Odor:** Solid white, granules, odorless (Potassium Phosphate), Solid crystals (Sodium Sulfite)  
Colorless crystals or white powder, characteristic odor (NaCl).

### Section 10. Stability and Reactivity

**Stability:**

Unstable

Stable

X

Conditions to Avoid: Heat and moisture contribute to instability. May air-oxidize.

**Incompatibility (Materials to Avoid):** Acids, strong oxidizing agents, and strong bases.

**Hazardous Decomposition or Byproducts:** Potassium oxides, Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sodium oxides, Sulfur oxides, and Hydrogen chloride gas. Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine. Contact with acids release Sulfur dioxide.

**Hazardous Polymerization:**

May Occur

Will Not Occur

X

Conditions to Avoid: Moisture and incompatible materials.

**Section 11. Toxicological Information**

**LD<sub>50</sub>:** ORL-RAT, 3000 mg/kg (Sodium Chloride), **LD<sub>50</sub>:** ORL-RAT, 728 mg / kg, Tumorigenic, carcinogenic, (Basic Fuchsin)  
**LD<sub>50</sub>:** ORL-RAT, 3,560 mg/kg Investigated as a mutagen.(Sodium Sulfite), **LD<sub>50</sub>:** SKN-RBT, > 4640 mg/kg (Potassium Phosphate)

**Section 12. Ecological Information**

**Ecotoxicity Tests:** Toxicity to fish: LC50: 1,294.6 mg/L – 96 hrs, *Lepomis macrochirus* (Bluegill) (Sodium Chloride)  
LC50: 660 mg/L – 96 hrs, *Gambusia affinis* (Mosquito fish) (Sodium Sulfite)

**Section 13. Disposal Considerations**

**Waste Disposal Method:** Dispose in accordance with all applicable federal, state, and local environmental regulations. If any questions arise, contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Container Information:** Do not remove labels from containers.

**Section 14. Transport Information**

**Potassium Phosphate, Sodium Chloride, Sodium Sulfite, Basic Fuchsin:\***

UN # --

Class:--

Packing Group: --

Hazard Class: --

IATA: Non-Hazardous for air transport

\*These chemicals are not regulated for transportation.

**Section 15. Regulatory Information**

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

**Potassium Phosphate, Sodium Chloride:** Xi (Irritant)

**Sodium Sulfite:** Xn (Harmful)

**Basic Fuchsin:** T (Toxic)

**Risk Phrases:**

**Potassium Phosphate:** R 36 / 37 / 38, Irritating to eyes, respiratory system, and skin.

**Sodium Chloride:** R 36 / 38, Irritating to eyes and skin.

**Sodium Sulfite:** R 22 / 36 / 38 / 44, Harmful if swallowed. Irritating to eyes and skin. Possible irreversible effects.

**Basic Fuchsin:** R 45, May cause cancer.

**Safety Phrases:**

**Potassium Phosphate:** S 22 / 24 / 25, Do not breathe dust. Avoid contact with skin and eyes.

**Sodium Chloride:** S 24 / 25 / 26, Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Sodium Sulfite:** S 22 / 26 / 36, Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical attention. Wear suitable protective clothing.

**Basic Fuchsin:** S 45 / 53, In case of accident or if you feel unwell, seek medical advice immediately (show label where possible). Avoid exposure, obtain special instruction before use.

**Section 16. Other Information**

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