Product # (s) 7302

MATERIAL SAFETY DATA SHEET

Section I – Product Information			
Product Name or Identity:	**APT Agar**		
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: 10/10/04			

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_{50}**
Sodium Chloride, NaCl, Common salt	N/A	N/A	ORL-RAT, 3000 mg/kg
Potassium Phosphate	N/A	N/A	SKN-RBT, >4640 mg/kg
Sodium Citrate	N/A	N/A	N/A

Section III – Physical Characteristics	
Boiling Point: 1413ºC (NaCl)	**Specific Gravity** (H_2O = 1): 2.16 g/cm^3 (NaCl), 1.7 (Sodium Citrate)
Vapor Pressure (mm Hg.): 1.0 @ 865ºC (NaCl)	**Melting Point:** 804ºC (NaCl), >465ºC (Potassium Phosphate) 150ºC (Sodium Citrate)
Vapor Density (AIR = 1): N/A	**Evaporation Rate** (Butyl Acetate = 1): N/A
Solubility in Water: 35.7 g/100g at 0ºC (NaCl), 150g/ 100g cold water (Potassium Phosphate), 72 g/100 g water (Sodium Citrate)	
Appearance and Odor: Colorless crystals or white powder. Characteristic odor. (NaCl) White crystals, odorless (Potassium Phosphate), White crystals, odorless (Sodium Citrate)	

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. 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. This material, like most materials in powder form, is capable of creating a dust explosion.	

Section V – Reactivity Data			
Stability:	Unstable		Conditions to Avoid: Sensitive to moisture. Hygroscopic.
	Stable	X	
Incompatibility *(Materials to Avoid)*: Reacts with acids, alkalis, oxidizing agents, Lithium, and Bromine trifluoride.			
Hazardous Decomposition or Byproducts: Potassium oxides, thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine. When heated to above 801°C it emits toxic fumes of chloride and sodium oxide. Carbon dioxide and Carbon monoxide may form when heated to decomposition.			
Hazardous Polymerization:	May Occur		Conditions to Avoid: Heat, flame, ignition source, dusting, and incompatible materials.
	Will Not Occur	X	

Section VI – Health Hazard Data			
Route(s) of Entry:	Inhalation? Yes	Skin? Yes	Ingestion? Yes
Health Hazards: *(Acute and Chronic)*	Irritant. Irritating to eyes, respiratory system, and skin. May be irritating to mucous membranes and upper respiratory tract.		
Carcinogenicity:	NTP? No (National Toxicology Program)	IARC Monographs? No (International Agency for Research in Cancer)	OSHA Regulated? No
Signs and Symptoms of Exposure: Irritating effect to eye. Phosphates are slowly and incompletely absorbed when ingested. Symptoms may include vomiting, diarrhea, blood chemistry effects, cardiac effects and central nervous system.			
Medical Conditions Generally Aggravated by Exposure: The toxicity of phosphates is their ability to sequester calcium. Potassium poisoning can result in heart effects, change in respiratory rate, tingling in the extremities, heaviness in the limbs, nausea and diarrhea. Persons with impaired kidney function may be more susceptible to the effects of the substance.			
Emergency / First Aid Procedures:	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.		

Section VII – Precautions for Safe Handling and Use
Accidental Release Measures: Remove all sources of ignition. 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. Suitable for any general chemical storage area. Store away from oxidizing agents. Containers of this material may be hazardous when empty since they retain product residues.
Other Precautions: Prevent formation of dust. Avoid prolonged or repeated exposure. Avoid contact with eyes, skin, and clothing. Ensure good ventilation / exhaustion at the workplace.

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.		