



MATERIAL SAFETY DATA SHEET

Section I – Product Information

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Product Name or Identity:	R2A 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
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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 LD₅₀
Potassium Phosphate	N/A	N/A	SKN RBT, > 4640 mg/kg
Sodium Pyruvate, Pyruvate acid sodium salt	N/A	N/A	N/A

Section III – Physical Characteristics

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Boiling Point: N/A	Specific Gravity (H₂O = 1): 2.338 (Potassium Phosphate)
Vapor Pressure (mm Hg.): N/A	Melting Point: >300°C (Sodium Pyruvate), >465°C (Potassium Phosphate)
Vapor Density (AIR = 1): N/A	Evaporation Rate (Butyl Acetate = 1): N/A
Solubility in Water: 150 g/100 g water (Potassium Phosphate), Soluble (Sodium Pyruvate)	
Appearance and Odor: White powder or crystals, odorless (Potassium Phosphate) 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. As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source. Firefighters should wear protective equipment and self-contained breathing apparatus.	
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: Stable under ordinary conditions of use and storage. Loses some moisture on exposure to dry air at room temperature.
	Stable	X	
Incompatibility (Materials to Avoid): Incompatible with strong bases, phosphates, lead, barium, and calcium.			
Hazardous Decomposition or Byproducts: Carbon monoxide (CO), Carbon dioxide (CO ₂), Sulfur oxides, Phosphorus oxides may form when heated to decomposition.			
Hazardous Polymerization:	May Occur		Conditions to Avoid: Heat, moisture, and incompatible material.
	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. Dust may be irritating causing sore throat or coughing.		
Carcinogenicity:	NTP? No (National Toxicology Program)	IARC Monographs? No (International Agency for Research in Cancer)	OSHA Regulated? No
Signs and Symptoms of Exposure: Exposure can cause irritation to mucous membranes. Dust may irritate eyes or upper respiratory tract. Phosphates are slowly and incompletely absorbed when ingested, and seldom result in systemic effects. If symptoms do develop they can include gastrointestinal irritation with nausea, vomiting, and diarrhea.			
Medical Conditions Generally Aggravated by Exposure: Chronic exposure of Potassium Phosphate may sequester calcium and cause calcium phosphate deposits in the kidneys. 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 immediately.		
	Inhalation: In case of unconsciousness, place patient on side position for transportation. 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: Immediately wash with plenty of soap and water for at least 15 minutes. If irritation develops, seek medical attention.		

Section VII – Precautions for Safe Handling and Use	
Accidental Release Measures: Ventilate spill area and remove all sources of ignition. Wear suitable protective clothing. Wipe up with damp sponge or mop. Clean up spills in a manner that does not disperse dust into the air.	
Waste Disposal Method: Dispose in accordance with all applicable federal, state, and local environmental regulations.	
Handling and Storing: Keep container tightly closed and stored in a cool, dry, ventilated area. Protect from moisture and physical damage. Avoid prolonged or repeated exposure.	
Other Precautions Avoid dust formation. Ensure good ventilation / exhaustion at the workplace. Containers of this material may be hazardous when empty since they retain product residues.	

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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