

# Material Safety Data Sheet

<b>Product Catalog Number:</b> 570-008 570-480  <b>Name (on Label):</b> ATAC PAK® Phosphorus Reagent Kit ATAC® Phosphorus Reagent Kit	<b>Note:</b>
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Section I - NAME AND PRODUCT	
<b>Manufacturer's Name:</b> Vital Diagnostics, Inc.	<b>Emergency Telephone Number:</b> 1-760-602-8700
<b>Address:</b> 27 Wellington Road Lincoln, RI 02865	<b>Telephone Number for Information:</b> 1-401-642-8400; 1-800-345-2822
	<b>Date Prepared:</b> 6/1/08

Section II - Hazard Ingredients/Identity Information								
Hazardous Components	CAS #	NFPA			Conc.	% (WT)	TLV	OSHA PEL
		Health	Fire	Reactivity				
Sulfuric Acid: LD50(oral rat): 2140 mg/kg	7664-93-9	N/A	N/A	N/A	N/A	2.0	TWA: 1.0 mg/m <sup>3</sup> STEL: 3.0 mg/m <sup>3</sup>	N/A
PEL: Permissible Exposure Limit established by the Occupational Safety and Health Administration (OSHA). TLV: Threshold Limit Value established by the American Conference of Governmental Industrial Hygienists, 1986-87.								

Section III - Physical/Chemical Characteristics	
<b>Boiling Point:</b> 554°F	<b>Specific Gravity (H<sub>2</sub>O = 1):</b> 1.834
<b>Vapor Pressure (mm Hg.):</b> N/A	<b>Melting Point:</b> 37.0°F
<b>Vapor Density (AIR = 1):</b> N/A	<b>Evaporation Rate:</b> N/A (Butyl Acetate = 1)
<b>Solubility in Water:</b> N/A	<b>Other Physical Data:</b> Decomposes at 644°F
<b>Appearance and Odor:</b> N/A	

Section IV - Fire and Explosion Hazard Data		
<b>Flash Point (Method Used):</b> N/A	<b>Flammable Limits</b>	
	<b>Lower Explosive Limit:</b>	<b>Upper Explosive Limit:</b>
	N/A	N/A
<b>Extinguishing Media:</b> Suitable for surrounding fire.		
<b>Special Fire Fighting Procedures:</b> Wear self-contained breathing apparatus and protective clothing.		
<b>Unusual Fire and Explosion Hazards:</b> Pure sulfuric acid, when heated to decomposition, emits highly toxic fumes and will react with water to produce toxic and corrosive fumes.		

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Section V - Reactivity Data			
<b>Stability:</b>	Unstable		<b>Conditions to Avoid:</b> N/A
	Stable	X	
<b>Incompatibility</b> ( <i>Materials to Avoid</i> ): None.			
<b>Hazardous Decomposition or Byproducts:</b> N/A			
<b>Hazardous Polymerization</b>	May Occur		<b>Conditions to Avoid:</b> N/A
	Will Not Occur	X	

Section VI - Health Hazard Data			
<b>Route(s) of Entry:</b>	<b>Inhalation:</b> Yes	<b>Skin:</b> Yes	<b>Ingestion:</b> Yes
<b>Health Hazards</b> ( <i>Acute and Chronic</i> ): Chronic: N/A Acute: N/A			
<b>Carcinogenicity:</b> No	<b>NTP:</b> N/A	<b>IARC Monographs:</b> N/A	<b>OSHA Regulated:</b> N/A
<b>Signs and Symptoms of Exposure:</b> Contact with the eyes may result in irritation or severe burns. Contact with the skin may cause irritation, dermatitis, burns or necrosis. If concentrated vapors are inhaled, coughing, headaches, dizziness, loss of consciousness, chronic bronchitis, chemical pneumonitis or lung damage may occur. No systemic effects due to continual ingestion of small amounts of sulfuric acid have been noted. Ingestion of large amounts may cause severe injury or death.			
<b>Medical Conditions Generally Aggravated by Exposure:</b> N/A			
<b>Emergency and First Aid Procedures:</b> <b>Ingestion:</b> Drink large quantities of water or milk. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Contact a physician or Poison Control Center. <b>Skin:</b> Flush skin with water for 15 minutes. Wash affected area thoroughly with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops or persists. <b>Eyes:</b> Flush eyes, including under the eyelids, with water for 15 minutes. Get immediate medical attention. <b>Inhalation:</b> Provide fresh air. Restore or support breathing. Keep victim warm and quiet. Call a physician if warranted.			

Section VII - Precautions for Safe Handling and Use
<b>Steps to Be Taken in Case Material is Released or Spilled:</b> Ventilate area. Eliminate ignition sources. Absorb with non-reactive absorbent. After absorption, scoop up into a container for proper disposal. Wash area clean after all material is picked up.
<b>Waste Disposal Method:</b> Comply with all federal, state and local regulations.
<b>Precautions to Be taken in Handling and Storing:</b> N/A
<b>Other Precautions:</b> N/A

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Section VIII - Control Measures		
<b>Respiratory Protection</b> ( <i>Specify Type</i> ): None required.		
<b>Ventilation:</b>	<b>Local Exhaust:</b> N/A	<b>Protective Gloves:</b> Yes
	<b>Mechanical</b> ( <i>General</i> ): Recommended.	<b>Eye Protection:</b> Yes. Provide eyewash station.
	<b>Special:</b> N/A	<b>Other Protective Clothing or Equipment:</b> Lab coat
	<b>Other:</b> Provide safety shower.	<b>Work/Hygienic Practices:</b> DO NOT PIPETTE BY MOUTH. Normal laboratory precautions are recommended.

Section IX – Other Information
<p><b>Miscellaneous Information:</b> The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification to the National Response Center of release of hazardous substances in quantities equal to or greater than the reportable quantities (RQ) in 40CFR 302.4. Components present in this product which could require reporting under the statute are:</p> <p style="padding-left: 40px;">Sulfuric Acid, CAS#7664-93-9, Concentration 2.0%</p> <p>Superfund Amendment and Reauthorization Act (SARA) Section 313 reporting requirements also apply to this product.</p> <p style="padding-left: 40px;">Sulfuric Acid, CAS#7664-93-9, Concentration 2.0%</p> <p>Under the Department of Transportation (DOT) regulations governing transportation of hazardous materials found in 49CFR, Subchapter C, component(s) contained in this kit are corrosive.</p> <p><i>The information contained in this document is believed to be factual, however, nothing presented herein is to be taken as a warranty or representation for which Vital Diagnostics shall be liable.</i></p>