

# Material Safety Data Sheet

<b>Product Catalog Number:</b> 1175-050	<b>Note:</b>
<b>Name (on Label):</b> Amylase Reagent Kit	

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				
HEPES	7365-45-9	N/A	N/A	N/A	N/A	1.43	Not established	N/A
Mannitol	69-65-8	N/A	N/A	N/A	N/A	3.0	Not established	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> HEPES: N/A Mannitol: 554°F	<b>Specific Gravity (H<sub>2</sub>O = 1):</b> N/A
<b>Vapor Pressure (mm Hg.):</b> N/A	<b>Melting Point:</b> HEPES: 234°C Mannitol: 333°F
<b>Vapor Density (AIR = 1):</b> HEPES: N/A Mannitol: 1.52	<b>Evaporation Rate:</b> N/A (Butyl Acetate = 1)
<b>Solubility in Water:</b> N/A	<b>Other Physical Data:</b> N/A
<b>Appearance and Odor:</b> N/A	

Section IV - Fire and Explosion Hazard Data		
<b>Flash Point (Method Used):</b> HEPES: N/A Mannitol: > 300°F	<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> HEPES: Pure HEPES will react with water or steam to produce toxic and corrosive fumes. Dangerous when exposed to heat or flame; can react with oxidizing materials. When heated to decomposition, it emits toxic fumes of nitrogen oxides, carbon monoxide, carbon dioxide, and sulfur oxides. Mannitol: Pure Mannitol is combustible and may emit toxic fumes on thermal decomposition.		

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Section V - Reactivity Data			
<b>Stability:</b>	Unstable		<b>Conditions to Avoid:</b> N/A
	Stable	X	
<b>Incompatibility</b> (Materials to Avoid): None			
<b>Hazardous Decomposition or Byproducts:</b> N/A			
<b>Hazardous Polymerization</b>	May Occur		<b>Conditions to Avoid:</b>
	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> (Acute and Chronic): Chronic: Acute:			
<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> HEPES: Contact with the eyes or absorption through the skin may cause irritation. If large quantities are inhaled, coughing, choking, inflammation and ulceration of respiratory tract may occur. Mannitol: Contact with eyes or skin may cause irritation. If ingested, may cause gastric irritation, nausea, and vomiting. If large quantities are inhaled, coughing, and irritation of respiratory tract may occur.			
<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, 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> Recommended.
	<b>Mechanical (General):</b> Recommended.	<b>Eye Protection:</b> Recommended. Provide eyewash station and safety shower.
	<b>Special:</b> N/A	<b>Other Protective Clothing or Equipment:</b> Lab coat recommended.
	<b>Other:</b> N/A	<b>Work/Hygienic Practices:</b> DO NOT PIPETTE BY MOUTH. Normal laboratory precautions are recommended.

Section IX – Other Information
<b>Miscellaneous Information:</b> None.
<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>