



An Advanced Analytical Technologies Company

**Material Safety Data Sheet****PK-044-0000 pKa Buffer 50 mM pH=4.4****PK-052-0000 pKa Buffer 50 mM pH=5.2****Section 1**

<b>CombiSep, Inc.</b>	<b>Emergency Telephone Number</b> 515-294-1690
<b>Address</b> 2711 South Loop Drive, Suite 4200 Ames, IA 50010	<b>Telephone Number for Information</b> 515-294-1690
<b>Date Prepared</b> 10/07/2003	<b>Signature of Preparer</b>

**Section 2 - Hazard Ingredients/Identity Information**

<b>CAS#</b>	<b>Hazardous Components</b>	<b>% by weight</b>
None	pKa Buffer 50mM, pH 4.4, pH 5.2  Information regarding the specific chemical identity of this material is being withheld as a trade secret of the manufacturer.	100%

**NFPA Rating (estimated)**

Health: 2 ; Flammability: 0 ; Reactivity: 0

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

**Section 3 - Physical/Chemical Characteristics**

<b>Boiling Point</b>	N/A	<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	1
<b>Vapor Pressure (mm Hg.)</b>	N/A	<b>Melting Point</b>	N/A
<b>Vapor Density (AIR = 1)</b>	N/A	<b>Evaporation Rate (Butyl Acetate = 1)</b>	N/A
<b>Solubility in Water</b> Completely miscible			
<b>Appearance and Odor</b> Clear, colorless. Pungent, vinegar odor.			

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**Section 4 - Fire and Explosion Hazard Data**

Flash Point (Method Used) N/A	Flammable Limits N/A	LEL N/A	UEL N/A
Extinguishing Media N/A			
Special Fire Fighting Procedures N/A			
Unusual Fire and Explosion Hazards N/A			

**Section 5 - Reactivity Data**

Stability	Stable	Conditions to Avoid N/A
Incompatibility ( <i>Materials to Avoid</i> ) Strong oxidizing agents		
Hazardous Decomposition or Byproducts Carbon monoxide, carbon dioxide		
Hazardous Polymerization	Will not occur	Conditions to Avoid N/A

**Section 6 - Health Hazard Data**

Route(s) of Entry:	Inhalation? Yes	Skin? Yes	Ingestion? Yes
Health Hazards ( <i>Acute and Chronic</i> ) Harmful if swallowed. Target organ(s): Liver, kidney, central nervous system, blood			
Carcinogenicity:	NTP? No	IARC Monographs?None	OSHA Regulated?No
Signs and Symptoms of Exposure To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.			
Medical Conditions Generally Aggravated by Exposure N/A			
Emergency and First Aid Procedures <b>Eyes:</b> Flush eyes with plenty of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Get medical aid. <b>Skin:</b> Immediately flush skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes. <b>Ingestion:</b> Wash out mouth with water provided person is conscious. Do not induce vomiting. Get medical aid. <b>Inhalation:</b> If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.			

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**Section 7 - Precautions for Safe Handling and Use**

**Steps to Be Taken in Case Material is Released or Spilled** Evacuate area. Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Cover with dry lime or soda ash. Place in a container to hold for waste pickup. Wash spill site after material pick up is complete.

**Waste Disposal Method**

Contact a licensed professional waste disposal service to dispose of this material.

**Precautions to Be taken in Handling and Storing** Do not breathe vapors. Wear compatible chemical resistant gloves and suitable eye protection.

**Section 8 - Control Measures**

**Respiratory Protection** (*Specify Type*) Use only in a chemical fume hood

<b>Ventilation</b>	<b>Local Exhaust</b> N/A	<b>Special</b> N/A
	<b>Mechanical (General)</b> N/A	<b>Other</b> N/A

<b>Protective Gloves</b> Wear compatible chemical resistant gloves	<b>Eye Protection</b> Wear safety glasses with side shields
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**Other Protective Clothing or Equipment** Laboratory coat

**Work/Hygienic Practices** Avoid contact with skin and eyes. Wash hands thoroughly after handling

**Section 9 – Transport Information**

	<b>US DOT</b>	<b>IATA</b>
<b>Shipping Name:</b>	None – this material is considered non-hazardous for transport	None – this material is considered non-hazardous for transport
<b>Hazard Class:</b>		
<b>UN Number:</b>		
<b>Packing Group:</b>		

Date Prepared: 10/07/03

Date Updated: 2/5/2004