



**COLUMBUS CHEMICAL INDUSTRIES INC.**

P.O. BOX 8  
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**Material Safety Data Sheet**

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements

**U.S. Department of Labor**

Occupational Safety and Health Administration  
 (Non-Mandatory Form)  
 Form Approved  
 OMB No. 1218-0072

**IDENTITY** (as Used on Label and List)

**Buffer, pH 4.01 Solution**

**Note:** Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

**Section I**

Manufacturers /Distributor Address Number Street City State and Zip Code

Columbus Chemical Industries

N4335 Temkin Road

Columbus, Wisconsin 53925

Emergency Telephone Number

CHEMTREC 1 (800) 424-9300

Telephone Number for Information

1-920-623-2140

Date Prepared

12-30-2004

Signature of Preparer (optional)

**Section II - Hazardous Ingredients/Identity Information**

Hazardous Components (Specific Chemical Identity, Common Name(s))	CAS #	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Potassium Acid Phthalate*	877-24-7	Not Available	Not Available	Not Available	1-2%
Thimerosal	54-64-8	0.01mg/m <sup>3</sup> (as Hg)	0.01mg/m <sup>3</sup> (as Hg)	Not Available	0.02%

\*Synonyms: Potassium Hydrogen Phthalate; 1,2-Benzenedicarboxylic acid, monopotassium salt.

**Section III - Physical/Chemical Characteristics**

Boiling Point	approximately	100 °C (212 °F)	Specific Gravity (H <sub>2</sub> O = 1)	1.0139
Vapor Pressure (mm Hg)		Not Available	Melting Point	approximately
				0 °C (32 °F)
Vapor Density (AIR = 1)		Not Available	Evaporation Rate (Butyl Acetate = 1)	Not Available

Solubility in Water

Complete.

Appearance and Odor

Clear, colorless liquid.

**Section IV Fire and Explosion Hazard Data**

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Nonflammable		Not Applicable	Not Applicable

Extinguishing Media

Water spray, dry chemical, carbon dioxide, alcohol foam.

Special Fire Fighting Procedures

In the event of a fire, wear full protective clothing and NIOSH/MSHA-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Unusual Fire and Explosion Hazards

May release toxic fumes of carbon monoxide and carbon dioxide.

**Section V Reactivity Data**

Stability	Unstable		Conditions to Avoid	Strong oxidizing agents.
	Stable	X		

**Incompatibility Materials to Avoid**

Sodium, potassium, lithium, magnesium,

**Hazardous Decomposition or Byproducts**

Carbon dioxide, carbon monoxide, sulfur oxide.

**Hazardous Polymerization****Conditions to Avoid**

	May Occur		
	Will Not Occur	X	Not available.

**Section VI Health Hazard Data**

<b>Routes of Entry</b>	<b>Inhalation ?</b>	<b>Skin ?</b>	<b>Ingestion ?</b>
	Yes	Yes	Yes

**Health Hazards (Acute and Chronic)**

May be harmful if swallowed. May be harmful if absorbed through skin or inhaled. May cause irritation upon contact with eyes or skin.

<b>Carcinogenicity</b>	<b>NTP</b>	<b>IARC Monographs</b>	<b>OSHA REGULATED?</b>
	Not listed	Not listed	Not listed

**Signs and Symptoms of Exposure.**

Irritation of eyes, skin and mucous membranes including redness, swelling and pain. Coughing, burning sensation, wheezing, laryngitis, shortness of breath, abdominal pain, diarrhea, coma, headache, muscle weakness, nausea, somnolence, and vomiting.

**Medical Conditions Generally Aggravated by Exposure**

Repeated or prolonged exposure is not known to aggravate medical conditions.

**Emergency and First Aid Procedures** **EYES/SKIN:** Flush immediately with plenty of water for at least 15 minutes. Remove contaminated clothing. Remove contact lenses if possible. Call physician. **INGESTION:** Wash out mouth with water if person is conscious. Give plenty of water. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**Section VII Precautions for Safe Handling and Use**

**Steps to be Taken in Case Material is Released or Spilled** Evacuate and ventilate area. Wear NIOSH/MSHA-approved respirator, chemical-resistant rubber boots, apron and rubber gloves. Absorb spill with vermiculite, sand or other inert material. Wash spill area thoroughly with water after pickup is complete. Keep unnecessary persons away from spill site.

**Waste Disposal Method** Dispose of spillage, and other materials used for clean up in accordance with all Federal, state, and local regulations.

**Precautions to be Taken in Handling and Storing** Do not get in eyes or on skin or clothing. Do not taste or swallow. Avoid breathing mists and vapors. Wash thoroughly after handling. Keep away from foodstuffs. Store in cool, well-ventilated area, out of direct sunlight. Keep container closed. Protect from freezing or physical damage.

**Other Precautions** Containers, even when empty, will retain residue and vapors. Always obey hazard warnings and handle empty containers as if they were full.

**Section VII Control Measures**

**Respiratory Protection (Specify Type)** NIOSH/MSHA-approved respirator with dust/mist cartridge.

Ventilation	<b>Local Exhaust</b>	Recommended.	<b>Special</b>	Safety shower nearby.
	<b>Mechanical (General)</b>	Recommended.	<b>Other</b>	Eye-wash station nearby.

**Protective Gloves** Compatible, chemical resistant. **Eye Protection** Chemical safety goggles.

**Other Protective Clothing or Equipment** Boots. Body-covering clothing.

**Work /Hygienic Practices** Contact lenses should not be worn when working with this material. Wear appropriate personal equipment. Wash thoroughly after handling. Do not breathe vapors. Avoid contact with eyes, skin and clothing. Wash contaminated clothing thoroughly after use. Avoid prolonged or repeated exposure.

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