



**COLUMBUS CHEMICAL INDUSTRIES INC.**

P.O. BOX 8  
COLUMBUS, WISCONSIN 53925-0008  
(920) 623-2140  
FAX (920) 623-2577

**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)**

**Potassium Permanganate**

**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

P.O. Box 8, N4335 Temkin Rd.

Columbus, WI 53925-0008

Emergency Telephone Number

CHEMTREC 1-800-424-9300

Telephone Number for Information

920-623-2140

Date Prepared

12-15-2004

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 Permanganate*	7722-64-7	5 mg Mn/m <sup>3</sup> (ceiling)	0.2 mg Mn/m <sup>3</sup>	Not Available	>97%

\*Subject to the reporting requirements of SARA Title III.

Synonyms: Permanganic acid, potassium salt; Chameleon mineral; Condy's crystals; Permanganate of potash.

**Section III - Physical/Chemical Characteristics**

Boiling Point	Dec@ 150 °C	Specific Gravity (H <sub>2</sub> O = 1)	2.7
Vapor Pressure (mm Hg)	N/A	Melting Point (begins to decompose)	150 °C/302 °F
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A

Solubility in Water

6.0% at 20 °C (68 °F); 20% at 65 °C (149 °F)

Appearance and Odor

Dark purple solid with a metallic luster, odorless

**Section IV Fire and Explosion Hazard Data**

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Not flammable	N/A	N/A	N/A

Extinguishing Media

Use large quantities of water. Water will turn pink to purple in contact with potassium permanganate. Dike to contain.

Special Fire Fighting Procedures

Watch for rapid burning and be prepared to retreat to a safe distance. If yellow, white or brown fumes are present, wear positive pressure breathing apparatus and full protective clothing.

Unusual Fire and Explosion Hazards

Powerful oxidizing material. May decompose spontaneously if exposed to intense heat 150 °C/302 °F. May be explosive in contact with certain other chemicals. May react violently with finely divided, oxidizable substances.

**Section V Reactivity Data**

Stability	Unstable		Conditions to Avoid	Avoid contact with organic and other incompatible materials; heat
	Stable	X		

**Incompatibility Materials to Avoid**

Organics and Combustible Materials

**Hazardous Decomposition or Byproducts**

When involved in a fire, potassium permanganate may form corrosive fumes

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

	May Occur		No known conditions.
	Will Not Occur		

**Section VI Health Hazard Data****Routes of Entry****Inhalation ?****Skin ?****Ingestion ?**

Multiple	Yes	Yes	Yes
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**Health Hazards (Acute and Chronic)**

Inhalation: airborne dust, mist or spray may irritate and cause damage to respiratory tract. Skin: Prolonged contact of solutions at room temperature may be irritating to skin, leaving brown stains and damage to skin.

Eye: Causes severe burns on contact. Ingestion: If swallowed, may cause severe burns to mucous membranes.

**Carcinogenicity****NTP****IARC Monographs****OSHA REGULATED?**

None	Not Listed	Not Listed	Not Listed
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**Signs and Symptoms of Exposure.**

Inhalation: irritation, cough, difficulty breathing. Skin/eyes: irritation, redness and/or swelling. Ingestion: nausea and irritation of mucosal membranes.

**Medical Conditions Generally Aggravated by Exposure**

Open wounds, burns and areas with mucosal damage.

**Emergency and First Aid Procedures**

Eyes: Immediately flush eyes with large amounts of water for at least 15 minutes, holding eyelids apart. Do not attempt to use chemical antidote. Seek medical attention. Skin: Immediately wash contaminated areas with water. Remove contaminated clothing and footwear and wash before reuse. Inhalation: Remove victim to fresh air. If breathing has stopped, resuscitate and administer oxygen.

**Section VII Precautions for Safe Handling and Use****Steps to be Taken in Case Material is Released or Spilled**

Keep combustibles from spilled material. Do not touch material. For small spills: shovel or sweep up the material; do not return spilled material to original container. Transfer to clean metal drum. To clean floors, flush with abundant quantities of water into sewer if permitted by federal, state and local regulations.

**Waste Disposal Method**

Observe all federal, state, and local regulations when disposing of this material. Aqueous solutions can be deactivated by treatment with sodium thiosulfate, a bisulfite or ferrous salt solution.

**Precautions to be Taken in Handling and Storing**

Protect containers from physical damage. Store in a cool, dry area in closed containers. Segregate from acids, peroxides, formaldehyde, and all combustible, organic or easily oxidizable materials including anti-freeze and hydraulic fluids.

**Other Precautions**

Avoid contact with combustible materials. Avoid storing with oxidizable materials.

**Section VII Control Measures****Respiratory Protection (Specify Type)**

NIOSH/MSHA approved respirator with dust/mist cartridge.

**Ventilation**

Local Exhaust Yes

Special Shower after handling.

Mechanical (General) Recommended.

Other Face shield recommended.

Protective Gloves Rubber gloves.

Eye Protection Chemical safety goggles

Other Protective Clothing or Equipment Body covering clothing or plastic apron.

Work /Hygienic Practices Do NOT get on skin, clothing, or in eyes. Avoid breathing, Store in cool, dry place. Avoid contact with combustible materials. Avoid storing with oxidizable materials. Keep out of reach of children. Wash exposed areas thoroughly after handling. Wash clothing before reuse.