MATERIAL SAFETY DATA SHEET



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MSDS No :

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HMIS

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Section 1	Chemical Product and Company Information
Product	POTASSIUMPERMANGANATE
Synonyms	Chameleon Mineral

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300

Section 2	Hazards Identification			
Emergency Overview		0 = Minimal	Health	2
DANGER! STRONG	1 = Slight	Fire	0	
CAUSES SEVERE BURNS. HARMFUL IF SWALLOWED. 2 = Moder Contact with combustible material may cause fire or explosion. Avoid contact 3 = Seriou				3
	ne alveol. Store away from acids, alkalies and combustible	4 - Severe	Contact	2

Section 3 Composition / Information on Ingredients							
Chemical Name	CAS#	%	TLV Units				
Potassium permanganate	7722-64-7	100%	TWA: 5 mg/m ³ (air) Ceil as manganese dust (ACGIH 2001)				

Section 4 First Aid Measures

materials. Target organs: None known.

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN CONTACT: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 **Fire Fighting Measures**

General information: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Containers may explode when heated. Use water spray to keep fire-exposed containers cool. Dike and collect water used to fight fire. Water runoff may create fire or explosion hazard. Powerful oxidizing material. Explosive in contact with sulfuric acid or hydrogen peroxide. Contact with other material may cause fire. May accelerate burning if involved in a fire. May react explosively with hydrocarbons (fuels). May ignite combustibles (wood, paper, oil, clothing, etc.) Spontaneously flammable on contact with glycerin or ethylene glycol. **NFPA**

Extinguishing Media: Use ONLY flooding quantities of water. Do NOT use carbon dioxide, dry chemical, foam or halon extinguishing materials.

Flash Point: N/A

Autoignition temperature: N/A

Explosion Limits: Lower: N/A Upper: N/A

0 = Minimal 1 = Slight 2 = Moderate 3 = Serious

4 = Severe

Section 6 **Accidental Release Measures**

Use proper personal protective equipment as indicated in Section 8. Remove all sources of ignition. Provide adequate ventilation. Recover for use if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water. Avoid runoff into storm sewers and ditches which lead to waterways.

(2008 EMERGENCY RESPONSE GUIDEBOOK, (PHH50-ERG2008), GUIDE PAGE NO. 140)

Section 7 Handling & Storage

OXIDIZER STORAGE CODE YELLOW

Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. For laboratory use only. Not for drug, food or household use. Keep out of reach of children. Handling: Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion. Do not inhale vapors, spray or mist. Wash thoroughly after handling. Remove and wash clothing before reuse. Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition

Exposure Controls / Personal Protection Section 8

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Decomposition temperature: N/A

Percent volatile (%): N/A

Molecular formula: KMnO₄

Molecular weight: 158.04

Solubility: 6.5 g/100 ml @ 20°C (68°F)

Specific gravity (H₂O = 1): 2.7032 @ 25°C

Respiratory protection: Use a chemical fume hood and/or wear a NIOSH/MSHA-approved respirator.

Section 9 **Physical & Chemical Properties**

Boiling point: Decomposes. Physical state: Solid. Freezing / Melting point: Decomposes @ 150°C (302°F)

Appearance: Dark purple crystals, metallic sheen. Odor: No odor. **pH**: 7-9 (20 g/l H₂O)

Vapor pressure (mm Hg): N/A Vapor Density (Air = 1): 5.47

sources.

Section 10

Evaporation rate (Butyl acetate = 1): N/A Viscosity: N/A

Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Exposure to incompatible materials and excessive temperatures.

Incompatibilities with other materials: Alcohols, arsenites, bromides, iodides, charcoal, hydrochloric acid, organic materials, ferrous or mercurous salts, hypophosphites, hyposulfites, sulfites, peroxides, oxalates, strong reducing agents, strong acids, formaldehyde, ethylene glycol, combustible organics, metal powders.

Hazardous decomposition products: Oxygen, oxides of potassium, oxides of manganese.

Section 11 **Toxicological Information**

Effects of overexposure: INGESTION: May irritate and cause burns of the mouth and throat. May cause liver and kidney damage. May cause perforation of the digestive tract. May cause central nervous system effects. In high doses, manganese may increase anemia by interfering with iron absorption. INHALATION: Causes respiratory tract irritation with possible burns. Other symptoms could include sore throat, coughing, and shortness of breath. In severe cases pulmonary edema may occur. EYES: Causes severe eye irritation and possible burns. May cause conjunctivitis and corneal damage. In extreme cases, cloudiness and discoloration of the cornea may occur. SKIN: Causes skin irritation and possible burns. Skin contact can cause brown stains in the area, and possible hardening of the outer skin layer.

RTECS #: SD6475000 ORL-RAT LD50: 1090 mg/kg ORL-MOUSE LD50: 2157 mg/kg

Section 12 **Ecological Information**

Harmful to aquatic life in very low concentrations.

Section 13 **Disposal Considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 **Transport Information**

UN/NA number: UN1490

Shipping name: Potassium permanganate

Hazard class: 5.1 Packing group: II

Exceptions: Ltd Qty £ 1 Kg.

Section 15 **Regulatory Information**

TSCA-listed, EINECS-listed (231-760-3), RCRA code D001

Section 16 **Additional Information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees, * Hazardous Materials Industrial Standards.