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## Section I - Product Identification

*Product:* An aqueous solution of potassium permanganate.

*Intended Uses:* Used in staining procedures or as a general laboratory reagent.

*Uses advised against:* For laboratory use only.

*Country of origin:* United States.

### Manufacturer Identification

Medical Chemical Corp.  
19430 Van Ness Ave.  
Torrance, CA 90501

Customer Service: Phone (310)787-6800  
Email: [Customerservice@med-chem.com](mailto:Customerservice@med-chem.com)  
FAX (310)787-4464

### Emergency Telephone Number

CHEMTREC Emergency Response Telephone Number: (800)424-9300. Note: The CHEMTREC phone number is only for emergencies involving spills, leaks, fire, exposure or accident. Please direct all other inquiries to our customer service phone number.



## Section II - Hazard Identification

This item is considered hazardous by 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). May cause skin irritation.

**Eye damage/eye irritation:** Category 2A (H319). Causes serious eye irritation.

**Acute toxicity (Oral):** Category 4 (H302). Harmful if swallowed.

**Acute toxicity (Dermal):** Category 5 (H313). Causes skin irritation.

**Reproductive Toxicity:** Category 2 (H361d). Suspected of damaging the unborn child.

**Specific target organ toxicity:** Category 2 (H303). Causes damage to organs through prolonged or repeated exposure.

**Signal word:** Warning

### Hazard statements

The toxicology of this compound have not been completely examined. It is Irritating to the eye, skin and respiratory system. Manganese salts are neurotoxins.

### Precautionary statements

P102 Keep out of reach of children.  
P220 Keep away from clothing and other combustible materials.  
P260 Do not breathe dust/fume/gas/mist/vapors/spray.  
P264 Wash thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P273 Avoid release to the environment.  
P281 Use personal protective equipment as required.  
P363: Wash contaminated clothing before reuse.  
P264+P265: Wash hands thoroughly after handling. Do not touch eyes.  
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

### Safety Ratings

*Health: Hazardous Flammability:* None *Reactivity:* Stable *Contact:* Slight  
*Recommended safety equipment:* Not normally required.

### NFPA Ratings

Health = 2 Flammability = 0 Reactivity = 0

### Potential Health Effects

*Manganese mainly affects the nervous system and may cause behavioral and other nervous system effects, including slow and clumsy movements. This combination of symptoms are referred to as "manganism"*

*Inhalation:* May be Irritating to respiratory tract.

*Ingestion:* While the toxicity of this compound is low, large doses may cause nausea, vomiting, diarrhea, etc

*Skin contact:* Causes skin irritation or aggravation of existing dermatitis. Causes skin to turn brown.

*Eye contact:* Causes serious eye irritation.

*Chronic Exposure:* Manganese compounds accumulate and are neurotoxic.

*Aggravation of preexisting conditions:* Unknown.

### Section III - Composition/Information on Components

Ingredient	CAS#	EC/List No.	%
Potassium Permanganate	7722-64-7	231-760-3	0.63% w/w

### Section IV - First Aid Measures

*Inhalation:* Remove from source of exposure and get medical attention for any breathing difficulty.

*Ingestion:* Rinse mouth with water but do not induce vomiting. Get medical advise.

*Skin Contact:* Wash affected area with soap and water. Get medical advice if irritation develops.

*Eye Contact:* Immediately rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical help.

### Section V - Fire Fighting Measures

*Fire:* Not normally a fire hazard. May cause fire on contact with organic material.

*Explosion:* Not normally an explosion hazard.

*Fire Extinguishing Media:* Any means suitable for surrounding fire.

*Special information:* No data available.

### Section VI - Accidental Release Measures

Absorb with a suitable absorbent and store in a suitable container for disposal.

### Section VII - Handling and Storage

P403+P233+P102; Store in a well-ventilated place. Keep container tightly closed. Keep out of reach of children.

### Section VIII - Exposure Control/Personal Protection

Component	ACGIH TLV	OSHA PEL	NIOSH	NIOSH IDLH
Potassium Permanganate	TWA 0.1 mg/m <sup>3</sup> (as Mn)	5 mg/m <sup>3</sup> (as Mn)	1 mg/m <sup>3</sup> (as Mn)	500 mg/m <sup>3</sup> (as Mn)

#### Legend

**ACGIH:** American Conference of Governmental Industrial Hygienists.

**OSHA:** Occupational Safety and Health Administration.

**NIOSH:** National Institute for Occupational Safety and Health.

**IDLH:** Immediately dangerous to life or health.

*Ventilation System:* Usually not required. When required, Refer to the ACGIH document, "Industrial Ventilation, a Manual of Recommended Practices" for details about ventilation.

*Personal Respirator:* Usually not required. In case of emergency, or when exposure levels are unknown, use a positive pressure, full face piece, air supplied respirator.

*Skin protection:* Protective gloves are required as part of good laboratory practice.

*Eye Protection:* Laboratory safety goggles or similar products are required.

### Section IX - Physical and Chemical Properties

*lash point:* Not applicable.

*Auto ignition temperature:* Not applicable

*Boiling point range:* No data

*Decomposition temperature:* No data

*Melting point:* ~0 °C

*pH:* No data

*Flammable Limits:* Not applicable.

*Boiling Point:* ~100 °C

*Density:* ~1.02 g/ml @ 22.5 °C

*Evaporation Rate (Water = 1):* 1

*Partition coefficient (n-Octanol/Water):* No data

*Solubility:* Miscible with water

Vapor pressure (mm Hg): 18 @ 20 °C  
VOC: Not applicable

Vapor density (air = 1): 0.6

## Section X - Stability and Reactivity

Stability: Stable under normal conditions.

Hazardous Decomposition Products: Manganese salts.

Hazardous polymerization: Will not occur.

Incompatibilities: Reacts with organic material.

Conditions to avoid: Excessive cold and heat.

## Section XI - Toxicological Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium Permanganate	1090 mg/kg (Rat)	>2000 mg/kg (Rat)	No data

### Cancer lists

<i>Ingredient</i>	<i>Known Carcinogenicity?</i>	<i>NTP?</i>	<i>Anticipated?</i>	<i>IARC Category</i>
Potassium Permanganate	No	No	No	No

## Section XII - Ecological Information

This product is expected to bioaccumulate. The product does not contain endocrine disrupters, persistent organic pollutants or ozone depleters.

**Soil Mobility:** Unknown

**Environmental Fate:** Manganese salts are not biodegradable.

**Hazardous to the aquatic environment, long-term hazard:** Category 1 (H410): Very toxic to aquatic life with long lasting effects

For potassium permanganate

Toxicity to freshwater fish (guppy): LC50 = 0.47 mg/l, 96 h

Toxicity to invertebrates (water flea): EC50 = 0.06 mg/l, 48 h

Toxicity to freshwater algae (green algae): EC50 = 0.32 mg/l, 72 h

## Section XIII - Disposal Considerations

Many local authorities will restrict the drain disposal of manganese compounds. Insure compliance with all federal, state and local government regulations

## Section XIV - Transportation Information

Not regulated by DOT or IATA.

## Section XV - Regulatory Information

### Chemical Inventory Status

<i>Ingredient</i>	<i>TSCA</i>	<i>EC</i>
Potassium Permanganate	Yes	Yes

### Federal and State Regulations

<i>Ingredient</i>	<i>SARA 302</i>		<i>SARA 313</i>		<i>RCRA</i>	<i>TSCA</i>	<i>Ca. Prop 65</i>
	<i>RQ</i>	<i>TPQ</i>	<i>List</i>	<i>Category</i>	<i>261.33</i>	<i>8(D)</i>	
Potassium Permanganate	No	No	Yes	Manganese Compound	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No

### SARA 311/312

<i>Acute:</i>	Yes
<i>Chronic:</i>	No
<i>Fire:</i>	No
<i>Pressure:</i>	No

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## **Section XVI - Other Information**

This information is believed to be correct at the time of publication but is not guaranteed as such, nor does it purport to be all inclusive. Medical Chemical Corp. assumes no liability for the accuracy or completeness of the information. The user assumes all responsibility for compliance with federal, state and local laws.

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