MATERIAL SAFETY DATA SHEET
Potassium permanganate extra pure AR

Section 1 - Chemical Product and Company Identification

MSDS Name: Potassium permanganate extrapure AR
Catalog Numbers: 1649287
Synonyms: Permanganic acid potassium salt
Company Identification: SISCO RESEARCH LABORATORIES PVT. LTD.
2-F, Satam Industrial Estate, ‘C’ Wing, 2nd Floor, Dr. Cardinal Gracious Road, Chakala, Andheri (East), Mumbai – 400 099.

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name: Potassium permanganate extrapure AR</th>
<th>%</th>
<th>EINECS#</th>
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<tr>
<td>7722 - 64 - 7</td>
<td>99.5%</td>
<td>231 - 760 - 3</td>
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Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Harmful if swallowed. Contact with combustible material may cause fire. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Potential Health Effects
Eye: Contact with eyes may cause severe irritation, and possible eye burns.
Skin: Exposure may cause irritation and possible burns. May be harmful if absorbed through the skin.
Ingestion: Harmful if swallowed. May cause kidney damage. May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns.
Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.
Chronic: Prolonged or repeated skin contact may cause defatting and dermatitis.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion: Get medical aid. Wash mouth out with water.
**Inhalation:**
Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

### Section 5 - Fire Fighting Measures

**General Information:**
Strong oxidizer. Contact with other material may cause fire. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

**Extinguishing Media:**
For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

### Section 6 - Accidental Release Measures

**General Information:**
Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**
Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

### Section 7 - Handling and Storage

**Handling:**
Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with clothing and other combustible materials.

**Storage:**
Keep away from sources of ignition. Do not store near combustible materials. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:**
Use adequate ventilation to keep airborne concentrations low.

**Personal Protective Equipment**

- **Eyes:** Wear chemical splash goggles.
- **Skin:** Wear appropriate gloves to prevent skin exposure.
- **Clothing:** Wear appropriate protective clothing to prevent skin exposure.
- **Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Section 9 - Physical and Chemical Properties

Physical State: Crystalline powder
Molecular Formula: KMnO₄
Molecular Weight: 158.04

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: High temperatures, incompatible materials, combustible materials, reducing agents.
Incompatibilities with Other Materials: Reducing agents, acids, acetic acid, ammonium nitrate, formaldehyde, phosphorus, sulfur, dimethyl formamide, titanium, arsenic, ammonium perchlorate, hydrochloric acid.
Hazardous Decomposition Products: Oxides of potassium.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 7722-64-7: SD6475000
LD₅₀/LC₅₀: RTECS: CAS# 7722-64-7: Oral, mouse: LD₅₀ = 2157 mg/kg; Oral, rat: LD₅₀ = 750 mg/kg;
Carcinogenicity: Potassium permanganate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity: Fish: Bluegill/Sunfish: LC₅₀: 1.5-18 mg/l; 96H
Fish: Striped bass: LC₅₀: 1.5-5.0 mg/l; 24H
Other: Do not empty into drains.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

IATA    IMO    RID/ADR
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**Section 15 - Regulatory Information**

**European/International Regulations**
European Labeling in Accordance with EC Directives
Hazard Symbols: XN O N
Risk Phrases:
R 22 Harmful if swallowed.
R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 8 Contact with combustible material may cause fire.

Safety Phrases:

**Section 16 - Additional Information**

**SISCO RESEARCH LABORATORIES** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.