

SAFETY DATA SHEET

POTASSIUM PERMANGANATE, 0.25% AQUEOUS

Section 1 - Chemical Product and Company Identification

SDS Name: Potassium Permanganate, 0.25% Aqueous
Catalog Numbers: SO-418, F-379-3, F-390-8, F-395-2
Company Identification: Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.
10 ELECTRONICS AVENUE
DANVERS, MA 01923
For information, call: 978-739-4883
Emergency Number: 800-424-9300
For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications

H302-Acute toxicity, oral: 4
H315-Skin corrosion/irritation: 2
H319-Serious eye damage/eye irritation: 2A
H361-Reproductive toxicity: 2
H373-Specific target organ toxicity, repeated exposure: 2
H410-Hazardous to the aquatic environment, chronic toxicity: 1

Pictograms or Hazard symbols and Hazard statement(s):



Signal word: Warning

Hazard Statements:

H302-Harmful if swallowed
H315-Causes skin irritation
H319-Causes serious eye irritation
H361-Suspected of damaging fertility or the unborn child

H373-May cause damage to organs through prolonged or repeated exposure (target organs: brain)
H410-Very toxic to aquatic life with long lasting effects

Precautionary Statements:

P201-Obtain special instructions before use.
P202-Do not handle until all safety precautions have been read and understood.
P260-Do not breathe dust/fume/gas/mist/vapours/spray.
P264-Wash thoroughly after handling.
P270-Do not eat, drink, or smoke when using this product.
P273-Avoid release to the environment.
P280-Wear protective gloves/protective clothing/eye protection/face protection.
P281-Use personal protective equipment as required.
P301+P312-If swallowed: Call a Poison Center or doctor/physician if you feel unwell.
P302+P352-If on skin: Wash with plenty of soap and water.
P305+P351+P338-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313-If exposed or concerned: Get medical advice/attention.
P314-Get medical advice/attention if you feel unwell.
P330-Rinse mouth.
P332+P313-If skin irritation occurs: Get medical advice/attention.
P337+P313-If eye irritation persists: Get medical advice/attention.
P362-Take off contaminated clothing and wash before reuse.
P391-Collect spillage.
P405-Store locked up.
P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
7722-64-7	Potassium Permanganate	0.25 w/v
7732-18-5	Water	Balance

Section 4 - First Aid Measures

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical attention.

Oral Exposure: If swallowed, seek immediate medical advice. Do not induce vomiting.

Inhalation Exposure: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam.

Hazardous Combustion Products: Potassium oxides, manganese/manganese oxides, irritating fumes and gases.

Flash Point: Not available

Autoignition Temperature: Not available

Explosion Limits, Lower: Not available

Upper: Not available

NFPA Rating: (estimated) Health: 2; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release to the environment. Do not release to drains. This material is very toxic to aquatic life with long lasting effects.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Ensure adequate ventilation. Wash thoroughly after handling. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Store in a tightly closed container at room temperature. Keep away from incompatible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Exposure Limits:

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Potassium Permanganate CAS#7722-64-7	0.02 mg/m ³ TWA 0.1 mg/m ³ TWA	1 mg/m ³ TWA 3 mg/m ³ STEL 500 mg/m ³ IDLH	5 mg/m ³ Ceiling

OSHA Vacated PELs: Potassium Permanganate: 5 mg/m³ Ceiling

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: Dark purple

Odor: Odorless

Vapor Pressure: Not available

Odor threshold: Not available

Vapor Density: Not available

pH: Not available

Relative density: Not available

Melting point/freezing point: Not available

Solubility: Soluble in water

Boiling Point: Not available

Flash point: Not available

Evaporation Rate: Not available

Flammability (solid, gas): Not available

Partition coefficient: n-octanol/water: Not available

Auto-ignition temperature: Not available

Decomposition temperature: Not available

Viscosity: Not available

Specific Gravity/Density: Not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat, freezing, and combustible material. Open flame and hot surfaces.

Incompatibilities with Other Materials: Strong reducing agents, strong acids, and combustible material.

Hazardous Decomposition Products: Potassium oxides, manganese/manganese oxides, irritating fumes and gases.

Section 11 - Toxicological Information

CAS#7722-64-7 Potassium Permanganate: RTECS#: SD6475000

LD50 Oral: 750 mg/kg (rat)

LD50 Dermal: >2000 mg/kg (rat)

LC50 Inhalation: Not available

Carcinogenicity: Potassium Permanganate CAS#7722-64-7 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop 65.

Epidemiology: Not available

Teratogenicity: Not available

Reproductive Effects: Suspected of damaging fertility or the unborn child.

Developmental Effects: Not available

Neurotoxicity: Not available

Mutagenicity: Not available

Specific Target Organ Toxicity, Single Exposure: Not available

Specific Target Organ Toxicity, Repeated Exposure: Brain.

The toxicological properties of this material have not been thoroughly investigated.

Section 12 - Ecological Information

Ecotoxicity: Do not release to the environment. Do not release to drains. Very toxic to aquatic life with long lasting effects. May cause long-term adverse effects in the environment.

CAS#7722-64-7 Potassium Permanganate:

EC50, freshwater algae: 0.41 mg/L 72h

ErC50, freshwater algae: 0.8 mg/L 72h static (desmodesmus subspicatus)(green algae)

LC50, freshwater fish: 0.47 mg/L 96h semi-static (poecilia reticulata)(guppy)

EC50, water flea: 0.06 mg/L 48h semi-static (daphnia magna)

EC50, bacteria: 164 mg/L 180min static (activated sludge)

Persistence and degradability: Not available

Bio-accumulative potential: Not available

Mobility: Will likely be mobile in the environment due to its water solubility.

Section 13 - Disposal Considerations

Disposal: Dispose of in accordance with all federal, state, and local regulations.

Section 14 – Transport Information

DOT

Non-Regulated

Section 15 - Regulatory Information

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information

SDS Creation Date: 10-15-12

Revision #1. 12-26-13 CF

Revision #2. 2-14-18

Revision #3. 2-22-22

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Rowley Biochemical, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rowley Biochemical, Inc. has been advised of the possibility of such damages.