

Safety Data Sheet

Potassium Permanganate, 0.5% Aqueous

Section 1 - Chemical Product and Company Identification

SDS Name: Potassium Permanganate, 0.5% Aqueous

Catalog Numbers: SO-420, F-393-2

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

H361-Reproductive toxicity: 2

H373-Specific target organ toxicity, repeated exposure: 2

H401-Hazardous to the aquatic environment, acute hazard: 2

H411-Hazardous to the aquatic environment, long-term hazard: 2

Pictograms or Hazard symbols and Hazard statement(s):



Signal Word: Warning

Hazard Statements:

H361-Suspected of damaging fertility or the unborn child

H373-May cause damage to organs through prolonged or repeated exposure (target organs: brain, liver)

H401-Toxic to aquatic life

H411-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.

P273-Avoid release to the environment.

P280-Wear protective gloves/protective clothing/eye protection/face protection.

P308+P313-If exposed or concerned: Get medical advice/attention.

P314-Get medical advice/attention if you feel unwell.

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 | 0.5 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. Get medical attention.

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

Oral Exposure: If swallowed, get immediate medical advice. Do NOT induce vomiting. Rinse mouth with water and drink small quantities of water (stop if the exposed person feels sick as vomiting may be dangerous).

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 and toxic 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.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Ensure adequate ventilation. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Keep in a tightly closed container. Store in a cool, dry, and well-ventilated area. Light sensitive. Keep away from combustible materials. 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 - TLV | NIOSH - IDLH | OSHA - Final PELs |
|---|---------------------------------|---|-------------------|
| Potassium Permanganate CAS#7722-64-7 | 0.02 mg/m3 TWA 0.1 mg/m3 TWA | 1 mg/m3 TWA 3 mg/m3 STEL 500 mg/m3 IDLH | 5 mg/m3 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: Approx. 7.3

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

Autoignition 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: Avoid light. Avoid incompatible materials and excess heat.

Incompatibilities with Other Materials: Strong acids, reducing agents, powdered metals, organic/combustible materials, peroxides, alcohols, chemically active metals, glycerin, ethylene glycol.

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

Information on the likely routes of exposure: Routes of entry anticipated: oral, dermal, inhalation, and eye.

Epidemiology: Not available.

Teratogenicity: Not available.

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

Developmental Effects: Not available.

Neurotoxicity: Not available.

Mutagenicity: No known significant effects.

Specific Target Organ Toxicity, Single Exposure: Not available.

Specific Target Organ Toxicity, Repeated Exposure: Brain, liver.

Symptoms associated with exposure: No specific data available.

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. Toxic to aquatic life with long lasting effects.

CAS#7722-64-7 Potassium Permanganate:

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

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

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

Revision #4: 8-28-24

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.