

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.25.2015

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Potassium Permanganate,0.1M

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Potassium Permanganate,0.1M

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25870

Recommended uses of the product and restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific, Inc
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Supplier Details:

Fisher Science Education
6771 Silver Crest Road, Nazareth, PA 18064
(724)517-1954

Emergency telephone number:

Fisher Science Education
Emergency Telephone No.: 800-535-5053

SECTION 2: Hazards identification

Classification of the substance or mixture:

Chronic hazards to the aquatic environment, category 3
Not classified for physical or health hazards under GHS.

Signal word: None

Hazard statements:

Harmful to aquatic life with long lasting effects.

Precautionary statements:

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Avoid release to the environment.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

CAS 7732-18-5	Deionized Water	98.42 %
CAS 7722-64-7	Potassium Permanganate	1.58 %
Percentages are by weight		

SECTION 4: First aid measures

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Description of first aid measures

After inhalation:

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing difficult, give oxygen.

After skin contact:

Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

After eye contact:

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Water runoff can cause environmental damage. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment:

Wear protective eyewear, gloves, and clothing. Refer to Section 8.

Additional information (precautions):

Move product containers away from fire or keep cool with water spray as a protective measure, where feasible. Avoid contact with skin, eyes, and clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Contain spilled material by diking or using inert absorbent.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

Methods and material for containment and cleaning up:

Contain spill using berms or dikes, Use suitable absorbent working from the outside of the spill towards the center and place in suitable container for disposal. Refer to Section 13. Wear protective eyewear, gloves, and clothing. Refer to Section 8.

Reference to other sections: None

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SECTION 7: Handling and storage

Precautions for safe handling:

Avoid contact with eyes, skin, and clothing. Wash hands after handling. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Do not eat, drink, smoke, or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Protect from freezing and physical damage. Keep away from food and beverages. Store away from incompatible materials. Store in cool, dry conditions in well sealed containers. Store with like hazards.

SECTION 8: Exposure controls/personal protection



Control Parameters:

No applicable occupational exposure limits.

Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Store in secondary containment if near sinks and drains to prevent release to the environment.

Respiratory protection:

Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present.

Protection of skin:

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection:

Safety glasses with side shields or goggles.

General hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Wash hands before breaks and at the end of work. Perform routine housekeeping.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Purple-colored liquid	Explosion limit lower:	No information available
		Explosion limit upper:	No information available
Odor:	Odorless	Vapor pressure at 20°C:	No information available
Odor threshold:	No information available	Vapor density:	No information available
pH-value:	No information available	Relative density:	No information available
Melting/Freezing point:	Approx -2C	Solubilities:	Infinite solubility
Boiling point/Boiling range:	Approx 101.2C	Partition coefficient (n-octanol/water):	No information available
Flash point (closed cup):	No information available	Auto/Self-ignition temperature:	No information available
Evaporation rate:	No information available	Decomposition temperature:	No information available

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Flammability (solid, gaseous):	No information available	Viscosity:	a. Kinematic: No information available b. Dynamic: No information available
Density at 20°C:	1.0 - 1.04		
Potassium Permanganate	Molecular Weight: 158.03		
Potassium Permanganate	Specific gravity is 2.700 g/cm3.		

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Incompatible materials.

Incompatible materials:

Reducing agents, sulfuric acid, flammables, metals, and reactive organic materials.

Hazardous decomposition products:

Carbon oxides (CO, CO2). Oxygen, oxides of potassium and manganese.

SECTION 11: Toxicological information

Acute Toxicity:

Oral:

750mg/kg Potassium Permanganate LD50 oral-rat

Chronic Toxicity: No additional information.

Skin corrosion/irritation: No additional information.

Serious eye damage/irritation: No additional information.

Respiratory or skin sensitization: No additional information.

Carcinogenicity: See section 15.

Germ cell mutagenicity: No additional information.

Reproductive Toxicity: No additional information.

STOT-single and repeated exposure: No additional information.

Additional toxicological information: No additional information.

SECTION 12: Ecological information

Ecotoxicity:

Potassium Permanganate LC50 - Oncorhynchus mykiss (rainbow trout): 0.3 - 0.6 mg/l - 96.0 h

Potassium Permanganate EC50 - Daphnia magna (Water flea): 0.084 mg/l - 48 h

Persistence and degradability: No additional information.

Bioaccumulative potential: No additional information.

Mobility in soil: No additional information.

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Other adverse effects:

Manganese and its compounds have moderate acute and chronic toxicity to aquatic life.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water.

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA

Not Dangerous Goods

Limited Quantity Exception:

None

Bulk:

RQ (if applicable): None

Proper shipping Name: Not Dangerous Goods.

Hazard Class: None

Packing Group: Not Dangerous Goods.

Marine Pollutant (if applicable): No additional information.

Comments: None

Non Bulk:

RQ (if applicable): None

Proper shipping Name: Not Dangerous Goods.

Hazard Class: None

Packing Group: Not Dangerous Goods.

Marine Pollutant (if applicable): No additional information.

Comments: None

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

7722-64-7 Potassium Permanganate.

N450 Manganese Compounds.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

7722-64-7 Potassium Permanganate 100.

Proposition 65 (California):

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Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada**Canadian Domestic Substances List (DSL):**

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material. This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note.

NFPA: 0-0-0

HMIS: 0-0-0

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.
PNEC Predicted No-Effect Concentration (REACH).
CFR Code of Federal Regulations (USA).
SARA Superfund Amendments and Reauthorization Act (USA).
RCRA Resource Conservation and Recovery Act (USA).
TSCA Toxic Substances Control Act (USA).
NPRI National Pollutant Release Inventory (Canada).
DOT US Department of Transportation.
IMDG International Maritime Code for Dangerous Goods.
IATA International Air Transport Association.
GHS Globally Harmonized System of Classification and Labelling of Chemicals.
IATA International Air Transport Association.

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ACGIH American Conference of Governmental Industrial Hygienists.
CAS Chemical Abstracts Service (division of the American Chemical Society).
NFPA National Fire Protection Association (USA).
HMIS Hazardous Materials Identification System (USA).
WHMIS Workplace Hazardous Materials Information System (Canada).
DNEL Derived No-Effect Level (REACH).
PNEC Predicted No-Effect Concentration (REACH).
CFR Code of Federal Regulations (USA).
SARA Superfund Amendments and Reauthorization Act (USA).
RCRA Resource Conservation and Recovery Act (USA).
GHS Globally Harmonized System of Classification and Labelling of Chemicals.
TSCA Toxic Substances Control Act (USA).
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