

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

**Initial preparation date:** : 11.05.2014**Permanganate Reagent****SECTION 1: Identification of the substance/mixture and of the supplier****Product name:** Permanganate Reagent**Manufacturer/Supplier Article number:** PP1404SS**Recommended uses of the product and restrictions on use:** Laboratory Chemicals**Manufacturer Details:**

AquaPhoenix Scientific, Inc.  
860 Gitts Run Road  
Hanover, PA 17331  
1-717-632-1291

**Emergency telephone number:****ChemTel: (24-hour)**

+1(800)255-3924

+1(813)248-0585 (International)

**SECTION 2: Hazards identification****Classification of the substance or mixture:****Oxidizing**

Oxidizing solids, category 3

**Irritant**Skin irritation, category 2  
Eye irritation, category 2A

Oxidizing Solids 2.

Skin Irrit. 2.

Eye Irrit. 2A.

**Signal word:** Warning**Hazard statements:**

May intensify fire; oxidizer.

Causes skin irritation.

Causes serious eye irritation.

**Precautionary statements:**

If medical advice is needed have product container or label at hand.

Keep out of reach of children.

Read label before use.

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Keep/Store away from clothing/combustible materials.

Take any precaution to avoid mixing with combustibles.

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

Wash skin thoroughly after handling.

In case of fire, use agents recommended in section 5 for extinction.

IF ON SKIN: Wash with soap and water.

Specific treatment (see supplemental first aid instructions on this label).

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

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Continue rinsing.  
 If eye irritation persists get medical advice/attention.  
 Dispose of contents and container as instructed in Section 13.

**Other Non-GHS Classification:** None**SECTION 3: Composition/information on ingredients****Ingredients:**

Ingredients:		
CAS 7732-18-5	Deionized Water	>97 %
CAS 7722-64-7	Potassium Permanganate	<3 %
Percentages are by weight		

**SECTION 4: First aid measures****Description of first aid measures****After inhalation:**

Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position. Seek medical assistance if cough or other symptoms appear.

**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. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses, if present and easy to do, and continue rinsing. Keep eyelids open while rinsing. Seek medical assistance.

**After swallowing:**

Rinse mouth with water. Never give anything by mouth to an unconscious person. Induce vomiting. Dilute with water or milk. Immediately seek medical attention.

**Most important symptoms and effects, both acute and delayed:**

Irritation. Shortness of breath. Headache. Nausea. Dizziness.

**Indication of any immediate medical attention and special treatment needed:** None**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 identified.

**Special hazards arising from the substance or mixture:**

Combustible dust formation is a risk. Flammable vapors may accumulate in confined spaces.

**Advice for firefighters:****Protective equipment:**

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

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**Permanganate Reagent****Additional information (precautions):**

Keep away from open flames, hot surfaces and sources of ignition. Have extinguishing equipment on-hand. Avoid inhaling gases, fumes, dust, mist, vapor and aerosols. Avoid contact with skin, eyes and clothing.

**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures:**

Have extinguishing equipment on-hand. Ensure adequate ventilation. Ensure that air-handling systems are operational.

**Environmental precautions:**

Small amounts may be flushed with large quantities of water.

**Methods and material for containment and cleaning up:**

Absorb with suitable material and containerize for disposal. Wear protective eyewear, gloves, and clothing. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13. Keep in suitable closed containers for disposal. Refer to Section 8.

**Reference to other sections:** None**SECTION 7: Handling and storage****Precautions for safe handling:**

Avoid contact with skin, eyes and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Do not eat, drink, smoke, or use personal products when handling chemical substances. Refer to Section 13.

**Conditions for safe storage, including any incompatibilities:**

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly closed. Store away from incompatible materials.

**SECTION 8: Exposure controls/personal protection**

**Control parameters:** 7722 - 64 - 7, Potassium permanganate, C 5.000000 mg/m<sup>3</sup> USA. OSHA.  
7722 - 64 - 7, Potassium permanganate, TWA 0.200000 mg/m<sup>3</sup> USA.  
ACGIH.  
7722 - 64 - 7, Potassium permanganate, TWA 1.000000 mg/m<sup>3</sup> USA.  
NIOSH.

**Appropriate engineering controls:** None

**Respiratory protection:** None

**Protection of skin:** None

**Eye protection:** None

**General hygienic measures:** None

**SECTION 9: Physical and chemical properties**

<b>Appearance (physical state, color):</b>	Purple colored liquid	<b>Explosion limit lower:</b>	Not determined
		<b>Explosion limit upper:</b>	Not determined
<b>Odor:</b>	Odorless	<b>Vapor pressure at 20°C:</b>	Not determined
<b>Odor threshold:</b>	Not determined	<b>Vapor density:</b>	Not determined
<b>pH-value:</b>	Not determined	<b>Relative density:</b>	Not determined
<b>Melting/Freezing point:</b>	Approximately - 2°C	<b>Solubilities:</b>	Soluble in water.
<b>Boiling point/Boiling range:</b>	Approximately 1012°C	<b>Partition coefficient (n-octanol/water):</b>	Not determined

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<b>Flash point (closed cup):</b>	Not determined	<b>Auto/Self-ignition temperature:</b>	Not determined
<b>Evaporation rate:</b>	Not determined	<b>Decomposition temperature:</b>	Not determined
<b>Flammability (solid, gaseous):</b>	Not determined	<b>Viscosity:</b>	a. Kinematic: Not determined b. Dynamic: Not determined
<b>Density at 20°C:</b>	Not determined		

**SECTION 10: Stability and reactivity****Reactivity:**

Reacts with metallic powders.

**Chemical stability:**

Stable under normal conditions.

**Possible hazardous reactions:**

None identified.

**Conditions to avoid:**

None identified.

**Incompatible materials:**

reducing agents, sulfuric acid, flammables, metals, reactive organic material.

**Hazardous decomposition products:**

Potassium oxides, Manganese, and Manganese oxides.

**SECTION 11: Toxicological information****Acute Toxicity:** No additional information.**Chronic Toxicity:** No additional information.**Skin corrosion/irritation:**

Skin - Rabbit Result : Corrosive - 4 h 7722-64-7.

**Serious eye damage/irritation:** No additional information.**Respiratory or skin sensitization:** No additional information.**Carcinogenicity:** No additional information.**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:**

7722 - 64 - 7, LC50 - Oncorhynchus mykiss (rainbow trout) - 0.3 - 0.6 mg/l - 96.0 h.

7722 - 64 - 7, EC50 - Daphnia magna (Water flea) - 0.084 mg/l - 48 h.

**Persistence and degradability:** No additional information.**Bioaccumulative potential:**

7722-64-7: Bioaccumulation Lamellibranchia (mussel). 7722-64-7: Bioconcentration factor (BCF): &lt; 10,000

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Remarks: Can accumulate in aquatic organisms.

**Mobility in soil:** No additional information.**Other adverse effects:** No additional information.**SECTION 13: Disposal considerations****Waste disposal recommendations:**

Dilute with water and flush to sewer. Dispose of empty containers as unused product. Product or containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). 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.

**SECTION 14: Transport information****US DOT****UN Number:**

ADR, ADN, DOT, IMDG, IATA

Not Regulated

**Limited Quantity Exception:**

None

**Bulk:****RQ (if applicable):** None**Proper shipping Name:** Not Regulated.**Hazard Class:** None**Packing Group:** III.**Marine Pollutant (if applicable):** No additional information.**Comments:** None**Non Bulk:****RQ (if applicable):** None**Proper shipping Name:** Not Regulated.**Hazard Class:** None**Packing Group:** III.**Marine Pollutant (if applicable):** No additional information.**Comments:** None**SECTION 15: Regulatory information****United States (USA)****SARA Section 311/312 (Specific toxic chemical listings):**

Acute, Reactive

**SARA Section 313 (Specific toxic chemical listings):**

7722-64-7 Potassium Permanganate.

**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 lb.

**Proposition 65 (California):**

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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 GHS guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

**NFPA:** 2-0-0**HMIS:** 2-0-2**GHS Full Text Phrases:** None**Abbreviations and Acronyms:** None