according to 29CFR1910/1200 and GHS Rev. 3

**Effective date**: 12.14.2014 Page 1 of 7

### Potassium Permanganate, 0.01M

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

Product name: Potassium Permanganate, 0.01M

Manufacturer/Supplier Trade name:

**Manufacturer/Supplier Article number**: S25869

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:

Signal word: None

#### **Hazard statements:**

Harmful if swallowed.

Harmful in contact with skin.

Harmful if inhaled.

## **Precautionary statements:**

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

Keep out of reach of children.

Read label before use.

Other Non-GHS Classification: None

# SECTION 3: Composition/information on ingredients

Ingredients:				
CAS 333-20-0	Potassium Thiocyanate, ACS	0.9718 %		
CAS 7732-18-5	Deionized Water	99.028 %		
		Percentages are by weight		

## **SECTION 4: First aid measures**

# **Description of first aid measures**

according to 29CFR1910/1200 and GHS Rev. 3

**Effective date**: 12.14.2014 Page 2 of 7

### Potassium Permanganate, 0.01M

#### After inhalation:

Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Get immediate medical attention. Do not use mouth-to-mouth. 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:

Flush with water for 15 minutes. Get medical assistance if irritation develops. Wash affected area with soap and water. Rinse thoroughly. Remove contaminated clothing and wash before reuse or discard. Seek medical attention if irritation, discomfort, or vomiting persists.

#### After eye contact:

Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance. Protect unexposed eye. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

## After swallowing:

Do NOT induce vomiting. Dilute with water or milk. Get medical assistance. 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.

## **SECTION 5: Firefighting measures**

# **Extinguishing media**

# Suitable extinguishing agents:

If in laboratory setting follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

## Unsuitable extinguishing agents:

Strong oxidizing agents, acids, and strong bases.

## Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors. Avoid generating dust. Fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.

# Advice for firefighters:

### **Protective equipment:**

Use NIOSH-approved respiratory protection or breathing apparatus. Ensure adequate ventilation. Ensure eyewash and safety showers are available. If in laboratory setting follow laboratory fire suppression procedures.

#### Additional information (precautions):

Use spark-proof tools and explosion-proof equipment. If feasible move product containers away from fire or keep cool with water spray as a protective measure.

#### **SECTION 6: Accidental release measures**

# Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. If possible stop the spill.

according to 29CFR1910/1200 and GHS Rev. 3

**Effective date**: 12.14.2014 Page 3 of 7

### Potassium Permanganate, 0.01M

## **Environmental precautions:**

Should not be released into environment. Prevent from reaching drains, sewer, or waterway. Collect contaminated soil for characterization per Section 13.

# Methods and material for containment and cleaning up:

Sweep up and containerize for disposal. Avoid generating dust. Always obey local regulations. Dust deposits should not be allowed to accumulate on surfaces. Dust may form an explosive mixture if sufficient concentration is released into the atmosphere. Avoid dispersal of dust in the air. Do not clear dust on surfaces with compressed air. Place into properly labeled containers for recovery or disposal. If in a laboratory setting follow Chemical Hygiene Plan procedures. If necessary use trained response staff or contractor.

#### Reference to other sections: None

# **SECTION 7: Handling and storage**

## **Precautions for safe handling:**

Wash hands after handling. Avoid contact with skin and eyes. Avoid generation of dust or fine particulate. Avoid contact with eyes, skin, and clothing. Use only under a chemical fume hood. If in a laboratory setting follow Chemical Hygiene Plan. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. Use only in well ventilated areas.

# Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, dry, and well-ventilated area. Store in inert atmosphere. Store away from acids. Store away from foodstuffs. Keep away from food, beverages, and feed sources. Store in well sealed containers. Keep product and empty container away from heat and sources of ignition. Store away from oxidizing agents. Keep container tightly sealed.

## SECTION 8: Exposure controls/personal protection





**Control Parameters:** No applicable occupational exposure limits.

Appropriate Engineering controls: It is recommended that all dust of

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents, an explosion suppression system, or an oxygen deficient environment. Use under a fume hood. Ensure that dust-handling systems (exhaust ducts, dust collectors, vessels, and processing equipment) are designed to prevent the escape of dust into the work area. Use only under a chemical fume hood. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

**Respiratory protection:** Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. For spills

respiratory protection may be advisable.

**Protection of skin:** Chemical resistant gloves. Select glove material impermeable and

resistant to the substance. Select glove material based on rates of

diffusion and degradation.

according to 29CFR1910/1200 and GHS Rev. 3

**Effective date**: 12.14.2014 Page 4 of 7

### Potassium Permanganate, 0.01M

Eye protection:

Safety glasses with side shields or goggles.

General hygienic measures:

Ensure adequate ventilation. Ensure eyewash and safety showers are available. The usual precautionary measures are to be adhered to when handling chemicals. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Keep away from food, beverages, and feed sources. Do not inhale gases, fumes, dust, mist, vapor, and aerosols.

# **SECTION 9: Physical and chemical properties**

Appearance (physical state, color):	Liquid	Explosion limit lower: Explosion limit upper:	Not Determined Not Determined
Odor:	Odorless	Vapor pressure at 20°C:	Not Determined
Odor threshold:	Not Determined	Vapor density:	Not Determined
pH-value:	Not Determined	Relative density:	Not Determined
	Not Determined		None
Boiling point/Boiling range:	Not Determined	Partition coefficient (noctanol/water):	Not Determined
Flash point (closed cup):	Not Determined	Auto/Self-ignition temperature:	Not Determined
Evaporation rate:	Not Determined	Decomposition temperature:	Not Determined
Flammability (solid, gaseous):	Not Determined	Viscosity:	a. Kinematic: Not Determined b. Dynamic: Not Determined
Density at 20°C:	Not Determined		

# SECTION 10: Stability and reactivity

Reactivity: None Chemical stability:

Light sensitive. Moisture sensitive. Air sensitive. No decomposition if used and stored according to

specifications.

# **Possible hazardous reactions:**

Contact with acids releases very toxic gases.

#### **Conditions to avoid:**

Incompatible products, exposure to light, moist air, water, excess heat, and dust formation.

## Incompatible materials:

Strong oxidizing agents, acids, and strong bases.

# **Hazardous decomposition products:**

Carbon monoxide, carbon dioxide, nitrogen oxides, and sulfur oxides.

# **SECTION 11: Toxicological information**

# **Acute Toxicity**:

Oral:

ECHA LD50 orl-rat: 854 mg/kg

Chronic Toxicity: No additional information.

**Skin corrosion/irritation**: No additional information.

according to 29CFR1910/1200 and GHS Rev. 3

**Effective date**: 12.14.2014 Page 5 of 7

### Potassium Permanganate, 0.01M

**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:**

Ecotoxicity: Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment. Do not release into the environment.

# Persistence and degradability:

Readily biodegradable. Readily degradable in the environment.

**Bioaccumulative potential**: No additional information.

**Mobility in soil**: No additional information.

Other adverse effects: No additional information.

## **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. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

# **SECTION 14: Transport information**

#### **US DOT**

**UN Number:** 

ADR, ADN, DOT, IMDG, IATA Not Regulated

Limited Quantity Exception: None

Bulk: Non Bulk:

RQ (if applicable): None RQ (if applicable): None

**Proper shipping Name:** Not Regulated. **Proper shipping Name:** Not Regulated.

Hazard Class: None Hazard Class: None

Packing Group: Not Regulated.

Marine Pollutant (if applicable): No

Marine Pollutant (if applicable): No

additional information. additional information.

Comments: None Comments: None

according to 29CFR1910/1200 and GHS Rev. 3

**Effective date**: 12.14.2014 Page 6 of 7

### Potassium Permanganate, 0.01M

# **SECTION 15: Regulatory information**

## **United States (USA)**

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

Acute

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

333-20-0 Potassium thiocyanate.

## RCRA (hazardous waste code):

None of the ingredients are listed.

## TSCA (Toxic Substances Control Act):

333-20-0 Thiocyanic acid, potassium salt (1:1).

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

None of the ingredients are listed.

# Proposition 65 (California):

#### 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. 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.

**NFPA**: 1-0-0 **HMIS**: 1-0-0

GHS Full Text Phrases: None

# **Abbreviations and Acronyms:**

according to 29CFR1910/1200 and GHS Rev. 3

**Effective date**: 12.14.2014 Page 7 of 7

# Potassium Permanganate, 0.01M

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.

IATA International Air Transport Association.

GHS Globally Harmonized System of Classification and Labelling of Chemicals.

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).

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