CIALUS

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.07.2015

Potassium Permanganate, ACS Grade

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

Product name:

Potassium Permanganate, ACS Grade

Manufacturer/Supplier Article number: NCPP1000-K

Recommended uses of the product and restrictions on use: Laboratory

Manufacturer Details:

AquaPhoenix Scientific 860 Gitts Run Road, Hanover, PA 17331 (717) 632-1291

Supplier Details:

Nashville Chemical 7001 Westbelt Drive, Nashville, TN 37209 (615) 350-7070

Emergency telephone number:

Emergency Telephone No.: (800) 255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture:



Oxidizing Oxidizing solids, category 2

Irritant Acute toxicity (oral, dermal, inhalation), category 4



Environmentally Damaging

Chronic hazards to the aquatic environment, category 1 Acute hazards to the aquatic environment, category 1

Ox. Sol. 2 H272. Acute Tox. 4 * H302. Aquatic Acute 1 H400. Aquatic Chronic 1 H410. Hazards Not Otherwise Classified - Combustible Dust.

Signal word: Danger

Hazard statements:

May intensify fire; oxidizer. Harmful if swallowed. Very toxic to aquatic life. Very toxic 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.

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Keep away from heat/sparks/open flames/hot surfaces. No smoking.	
Take any precaution to avoid mixing with combustibles.	
Wash thoroughly after handling.	
Do not eat, drink or smoke when using this product.	
Avoid release to the environment.	
Wear protective gloves/protective clothing/eye protection/face protection.	
Use personal protective equipment as required.	
Rinse mouth.	
Collect spillage.	
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.	
In case of fire: Use for extinction.	
Store in a dry place.	
Dispose of contents/container.	

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:				
CAS 7722-64-7	Potassium Permanganate	100 %		
Percentages are by weight				

SECTION 4: First aid measures

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. Give artificial respiration if necessary.

After skin contact:

Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

After eye contact:

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

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Dilute with water or milk. Seek medical attention immediately.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath. Irritation/burns, all routes of entry.

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:

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

Unsuitable extinguishing agents:

dry chemicals, carbon dioxide, halon or foams.

Special hazards arising from the substance or mixture:

Contact with other material may cause a fire. Some oxidizers may react explosively with hydrocarbons. Containers may explode when heated. Water runoff can cause environmental damage. Combustion products may include carbon oxides or other toxic 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. Oxygen, oxides of potassium and manganese.

Advice for firefighters:

Protective equipment:

Use NIOSH-approved respiratory protection/breathing apparatus.

Additional information (precautions):

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

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. Transfer to a disposal or recovery container. Wear protective equipment. Use spark-proof tools and explosion-proof equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible.

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:

Always obey local regulations. Absorb with suitable material and treat as normal refuse. If in a laboratory setting, follow Chemical Hygiene Plan procedures. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air. Collect solids in powder form using vacuum with HEPA filter. Small amounts of liquid may be flushed to sewer with large quantities of water.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Avoid contact with skin, eyes and clothing. Wash hands after handling. Discard contaminated materials. 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:

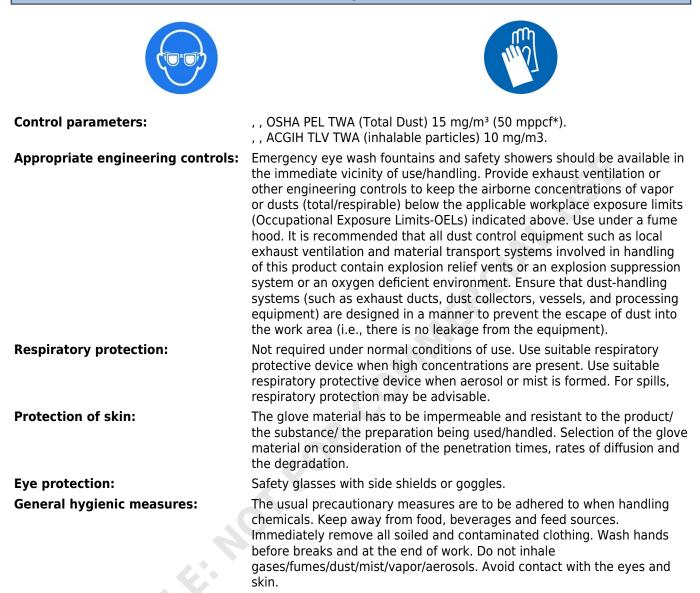
Protect from freezing and physical damage. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Store with like hazards.

SECTION 8: Exposure controls/personal protection

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SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Dark purple-bronze crystals.	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:	2.700 g/cm3
Melting/Freezing point:	24 C	Solubilities:	6.4g/100mL @ 20C
Boiling point/Boiling range:	Not determined	Partition coefficient (n- octanol/water):	Not determined
Flash point (closed cup):	Not determined	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	Not determined	Decomposition temperature:	Not determined

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Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined	
Density at 20°C:	Not determined			
Potassium Permanganate	Molecular Weight: 158.03			
Potassium Permanganate	Specific gravity is 2.700 g/cm ³ .			

SECTION 10: Stability and reactivity

Reactivity: None

Chemical stability:

No decomposition if used and stored according to specifications.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Dust generation, temperatures above 150C. Store away from strong acids or bases.

Incompatible materials:

Strong bases. reducing agents, strong acids, formaldehyde, peroxides, arsenites, mercurous salts, hypophosphites, combustible organics, sulfites, bromide, hydrochloric acid, charcoal, iodides, metal powders, ethylene glycol, organic materials, some metals, ferrous salts.

Hazardous decomposition products:

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

SECTION 11: Toxicological information

Acute Toxicity: No additional information. 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: 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:

LC50 - Oncorhynchus mykiss (rainbow trout), 0.3 - 0.6 mg/l - 96.0 h. 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. Other adverse effects:

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

SECTION 13: Disposal considerations

Waste disposal recommendations:

All chemical waste generators must determine whether a discarded chemical is classified as hazardous waste. 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. Comply with all local, state, and federal regulations.

SECTION 14: Transport information

US DOT

UN Number: ADR, ADN, DOT, IMDG, IATA

Limited Quantity Exception:

Bulk: RQ (if applicable): None Proper shipping Name: Potassium Permanganate. Hazard Class: 5 Packing Group: II. Marine Pollutant (if applicable): No additional information. Comments: None



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None

Non Bulk: RQ (if applicable): None Proper shipping Name: Potassium Permanganate. Hazard Class: 5 Packing Group: II. 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. 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):

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7722-64-7 Potassium Permanganate 100.

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: 2-0-3 HMIS: 2-0-3 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.
- 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).

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SAMPLE: NOT FOR COMMERCIAL DNEL Derived No-Effect Level (REACH).