

1. IDENTIFICATION

Product Identifier

Product Name POTASSIUM PERMANGANATE SOLUTION

Recommended use of the chemical and restrictions on use

Recommended use Iron sulfide remediation

Restrictions on use For industrial use only

Supplier details

West Penetone Inc.
11411-160 Street
Edmonton, AB,
T5M3T7
Tel: 780-454-3919

Emergency Telephone Number

Canutec (613)-996-6666

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Hazardous to the aquatic environment, acute hazard	Category 2
Hazardous to the aquatic environment, long-term hazard	Category 2

Label Elements

DANGER

Hazard Statements

Causes skin irritation
Causes serious eye damage
Toxic to aquatic life
Toxic to aquatic life with long lasting effects



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN: Wash with plenty of water. If skin irritation occurs, get medical advice/attention. Take off contaminated clothing and wash it before re-use.
Collect spillage.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant according to local, provincial/federal regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
potassium permanganate	7722-64-7	4

4. FIRST AID MEASURES

Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician
Skin contact	Wash with plenty of water. If skin irritation occurs, get medical advice/attention. Take off contaminated clothing and wash it before re-use.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if symptoms develop or persist.
Ingestion	Rinse mouth. Remove person to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed by medical personnel. Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

Contact with eyes may cause serious eye damage leading to irritation, discomfort or pain, excess blinking and tear production with marked redness and swelling of the conjunctiva, blurred vision and possible corneal injury. Contact with skin may cause irritation with local redness. Material is destructive to the tissue of the mucous membranes and upper respiratory tract and may be harmful if inhaled. Material may be harmful if swallowed.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

None.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed including oxides of potassium and manganese.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin, eyes and clothing. Use personal protective equipment. Use appropriate containment to avoid environmental contamination.

Environmental Precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

Contain and solidify with inert absorbent material. Keep in suitable, closed containers for disposal. Following product recovery, flush area with water. For large spills, stop flow of material, prevent product from entering drains, and pump off product where this is without risk and possible. Proceed as above.

7. HANDLING AND STORAGE**Precautions for Safe Handling**

Handling Avoid contact with skin, eyes and clothing. Avoid inhalation of vapor or mist.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed away from direct sunlight in a dry, cool and well-ventilated place, away from incompatible materials.

Incompatible Materials Organic and combustible materials, strong reducing agents and acids, peroxides, alcohols, nitrates, perchlorates, hypophosphites, hyposulfites, sulphites, oxalates, halides, and hydrides.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Control parameters**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
potassium permanganate 7722-64-7	TWA: 0.2 mg/m ³	Not listed	Not listed

Appropriate engineering controls

Engineering Controls Eye wash facilities must be made available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face Protection Safety glasses with side shields or goggles.

Skin and body protection Wear protective gloves and protective clothing.

Respiratory Protection Wear respiratory protection in case of vapor/aerosol release.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE :**

Violet liquid

ODOR

Odorless

ODOR THRESHOLD :

Not applicable

pH :

Neutral

MELTING POINT / FREEZING POINT :

0°C

BOILING POINT/BOILING RANGE :

100°C

FLASH POINT :

None

EVAPORATION RATE, water = 1 :

1

FLAMMABILITY (SOLID, GAS):

Not applicable

VAPOR PRESSURE, mm Hg AT 20°C :

Not applicable

VAPOR DENSITY (Air = 1) :

Not applicable

RELATIVE DENSITY AT 20°C:

1.010-1.020

SOLUBILITY IN WATER :

Complete

PARTITION COEFFICIENT, N-OCTANOL/WATER :

Not available

AUTO-IGNITION TEMPERATURE :

None

DECOMPOSITION TEMPERATURE:

Not available

VISCOSITY:

Not available

FLAMMABLE LIMITS :**UPPER:** Not applicable **LOWER :** Not applicable

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive.

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid

Extreme temperatures. Store away from incompatible materials.

Incompatible Materials

Organic and combustible materials, strong reducing agents and acids, peroxides, alcohols, nitrates, perchlorates, hypophosphites, hyposulfites, sulphites, oxalates, halides, and hydrides.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Material liberates chlorine in contact with hydrochloric acid. Explosion hazards may occur when in contact with sulphuric acid, peroxides, nitric acid, alcohols, arsenic, phosphorous, sulphur, titanium and aldehydes. Thermal decompositions can lead to release of toxic metal fumes such as oxides of potassium and manganese.

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
potassium permanganate 7722-64-7	525 mg/kg (rat)	Not listed	Not listed

Information on likely sources of exposure

Serious eye damage/irritation	Causes serious eye damage.
Skin corrosion/irritation	Causes skin irritation.
Ingestion	Expected to be a low ingestion hazard.
Inhalation	Expected to be a low inhalation hazard.

Delayed and immediate effects and also chronic effects from short and long-term exposure

Respiratory or skin sensitization	Not a sensitizer.
Germ cell mutagenicity	None known.
Carcinogenicity	No listed carcinogens.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT-repeated exposure	No information available.
Aspiration Hazard	None.

Symptoms related to the physical, chemical and toxicological characteristics

May cause serious eye damage. Skin irritation.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

If available, ecotoxicity values of individual components are shown below.

Chemical Name	Fish	Waterflea	Algae
potassium permanganate 7722-64-7	0.1 mg/L: 96 h ictalurus punctatus LC50	0.06 mg/L: 48 h daphnia magna EC50	Not available

Persistence and degradability

Not applicable to inorganic substances.

Bioaccumulative potential

Does not significantly accumulate in organisms.

Mobility in soil

No information available

Other adverse effects

Do not release untreated into natural waters. No other adverse environmental effects are expected.

13. DISPOSAL CONSIDERATIONS**Waste Disposal Method**

Dispose of in accordance with local regulations.

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION**TDG classification**

UN 3082, Environmentally Hazardous Substance, Liquid, N.O.S. (potassium permanganate solution), Class 9, PG III

15. REGULATORY INFORMATION

All ingredients are listed on the DSL

16. OTHER INFORMATION**Preparation Date**

22 April, 2016

Revision Date

not applicable

Revision Note

not applicable

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of SDS