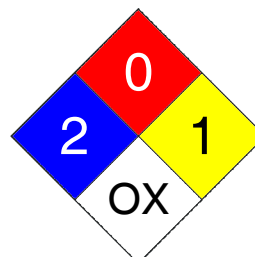


1. Product and Company Identification

Product Name Pot-Perm™, Fer-Sul Potassium Permanganate
CAS # 7722-64-7
Product use Regeneration of greensand iron filters
Manufacturer Pro Products LLC
 7201 Engle Road
 Fort Wayne, IN 46804-5875 US
 Phone 260-483-2519
 Emergency Phone: 1-800-424-9300 (CHEMTREC)

| LEGEND HMIS/NFPA | |
|---------------------|---|
| Severe | 4 |
| Serious | 3 |
| Moderate | 2 |
| Slight | 1 |
| Minimal | 0 |

| | |
|---------------------|-----|
| Health | / 2 |
| Flammability | 0 |
| Physical Hazard | 1 |
| Personal Protection | B |



2. Hazards Identification

Emergency overview DANGER -- CORROSIVE
 Oxidizing material.

Potential short term health effects

- Routes of exposure** Eye, Skin contact, Inhalation, Ingestion.
- Eyes** May cause chemical burns. May cause blindness.
- Skin** May cause chemical burns.
- Inhalation** Inhalation of dusts may cause respiratory irritation.
- Ingestion** Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

Target organs Skin. Eyes. Respiratory system.

Chronic effects Long-term inhalation of dust concentrations higher than recommended permissible exposure limits may cause delayed lung injury. Prolonged or repeated exposure may lead to liver or kidney damage or central nervous system effects.

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin. The product causes burns of eyes, skin and mucous membranes.

3. Composition / Information on Ingredients

| Ingredient(s) | CAS # | Percent |
|------------------------|-----------|----------|
| Potassium permanganate | 7722-64-7 | 60 - 100 |

4. First Aid Measures

First aid procedures

- Eye contact** Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.
- Skin contact** Brush away excess of dry material. Immediately flush with cool water for 15 minutes. Obtain medical attention if irritation persists. Wash contaminated clothing well before reuse or discard.
- Inhalation** If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
- Ingestion** Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

General advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

| | |
|---|---|
| Flammable properties | Not flammable by WHMIS/OSHA criteria. |
| Extinguishing media | |
| Suitable extinguishing media | Water. |
| Unsuitable extinguishing media | Not available |
| Protection of firefighters | |
| Specific hazards arising from the chemical | Container may explode in heat of fire. May decompose spontaneously if exposed to temperatures above 150°C. Increases flammability of combustible materials. |
| Protective equipment for firefighters | Firefighters should wear full protective clothing including self contained breathing apparatus. |
| Hazardous combustion products | May include and are not limited to: Oxides of manganese. Oxygen. |
| Explosion data | |
| Sensitivity to mechanical impact | Not available |
| Sensitivity to static discharge | Not available |

6. Accidental Release Measures

| | |
|--------------------------------|---|
| Personal precautions | Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. |
| Methods for containment | Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Prevent entry into waterways, sewers, basements or confined areas. |
| Methods for cleaning up | Should not be released into the environment. Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Large Spills: Wet down with water and dike for later disposal. After removal flush contaminated area thoroughly with water. |

7. Handling and Storage

| | |
|-----------------|--|
| Handling | Avoid dust formation. Use good industrial hygiene practices in handling this material. Do not get this material in your eyes, on your skin, or on your clothing. |
| Storage | Keep out of reach of children. Store in a closed container away from incompatible materials. Keep away from heat, open flames or other sources of ignition. |

8. Exposure Controls / Personal Protection

| | |
|---------------------------------------|---|
| Exposure limits | |
| Ingredient(s) | Exposure Limits |
| Potassium permanganate | ACGIH-TLV Not established OSHA-PEL Not established |
| Engineering controls | Use only under good ventilation conditions or with respiratory protection. Local exhaust recommended. |
| Personal protective equipment | |
| Eye / face protection | Chemical splash goggles. |
| Hand protection | Rubber gloves. Confirm with a reputable supplier first. |
| Skin and body protection | As required by employer code. Rubber apron recommended. |
| Respiratory protection | Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. |
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product. |

9. Physical and Chemical Properties

| | |
|---|----------------------|
| Appearance | Crystals |
| Color | Dark Metallic Purple |
| Form | Solid. |
| Odor | Odorless |
| Odor threshold | Not available |
| Physical state | Solid |
| pH | Not available |
| Melting point | Not available |
| Freezing point | Not applicable |
| Boiling point | Not applicable |
| Flash point | None |
| Pour point | Not available |
| Evaporation rate | Not applicable |
| Flammability limits in air, lower, % by volume | Not applicable |
| Flammability limits in air, upper, % by volume | Not applicable |
| Vapor pressure | Not applicable |
| Vapor density | Not applicable |
| Specific gravity | 2.7 |
| Octanol/water coefficient | Not available |
| Solubility (H2O) | Partially soluble |
| Auto-ignition temperature | Not applicable |
| Viscosity | Not applicable |
| Percent volatile | 0 |

10. Stability and Reactivity

| | |
|---|--|
| Chemical stability | Stable, however, may decompose if heated. |
| Conditions to avoid | Do not mix with other chemicals. |
| Incompatible materials | Acids. Reducing agents. Metals. Organic materials. Combustible materials. Hydrogen peroxide. |
| Hazardous decomposition products | May include and are not limited to: Oxides of manganese. Oxygen. |
| Possibility of hazardous reactions | Hazardous polymerization does not occur. |

11. Toxicological Information

Component analysis - LC50

| Ingredient(s) | LC50 |
|------------------------|---------------|
| Potassium permanganate | Not available |

Component analysis - Oral LD50

| Ingredient(s) | LD50 |
|------------------------|----------------|
| Potassium permanganate | 1090 mg/kg rat |

Effects of acute exposure

| | |
|------------------------|--|
| Eye | May cause chemical burns. May cause blindness. |
| Skin | May cause chemical burns. |
| Inhalation | Inhalation of dusts may cause respiratory irritation. |
| Ingestion | Harmful if swallowed. May cause chemical burns to mouth, throat and stomach. |
| Sensitization | Not classified or listed by IARC, NTP, OSHA and ACGIH. |
| Chronic effects | Not classified or listed by IARC, NTP, OSHA and ACGIH. |
| Carcinogenicity | Not classified or listed by IARC, NTP, OSHA and ACGIH. |
| Mutagenicity | Not classified or listed by IARC, NTP, OSHA and ACGIH. |

| | |
|------------------------------|--|
| Reproductive effects | Not classified or listed by IARC, NTP, OSHA and ACGIH. |
| Teratogenicity | Not classified or listed by IARC, NTP, OSHA and ACGIH. |
| Synergistic Materials | Not available |

12. Ecological Information

Ecotoxicity Components of this product have been identified as having potential environmental concerns.

Ecotoxicity - Freshwater Fish Species Data

| | | |
|------------------------|-----------|--|
| Potassium permanganate | 7722-64-7 | 96 Hr LC50 Carassius auratus: 3.3-3.93 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 2.97-3.11 mg/L; 96 Hr LC50 Cyprinus carpio: 3.16-3.77 mg/L; 96 Hr LC50 Lepomis macrochirus: 2.3 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 1.8-5.6 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 2.7 mg/L; 96 Hr LC50 Oncorhynchus mykiss: 1.08-1.38 mg/L; 96 Hr LC50 Oncorhynchus mykiss: 0.769-1.27 mg/L [static] |
|------------------------|-----------|--|

| | |
|--|--------------------------|
| Environmental effects | Harmful to aquatic life. |
| Aquatic toxicity | Not available |
| Persistence / degradability | Not available |
| Bioaccumulation / accumulation | Not available |
| Partition coefficient | Not available |
| Mobility in environmental media | Not available |
| Chemical fate information | Not available |
| Other adverse effects | Not available |

13. Disposal Considerations

| | |
|--|--|
| Waste codes | Not available |
| Disposal instructions | Review federal, state/provincial, and local government requirements prior to disposal. |
| Waste from residues / unused products | Not available |
| Contaminated packaging | Not available |

14. Transport Information

U.S. Department of Transportation (DOT)

Basic shipping requirements:

| | |
|--------------------------------|------------------------|
| Proper shipping name | Potassium permanganate |
| Hazard class | 5.1 |
| UN number | UN1490 |
| Packing group | II |
| Additional information: | |
| Special provisions | IB8, IP4, T3, TP33 |
| Packaging exceptions | 152 |
| ERG number | 140 |



Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

| | |
|----------------------|------------------------|
| Proper shipping name | POTASSIUM PERMANGANATE |
| Hazard class | 5.1 |
| UN number | UN1490 |
| Packing group | II |



15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canada - WHMIS - Ingredient Disclosure List

| | | |
|------------------------|-----------|-----|
| Potassium permanganate | 7722-64-7 | 1 % |
|------------------------|-----------|-----|

US Federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

| | | |
|------------------------|-----------|-----------------------------------|
| Potassium permanganate | 7722-64-7 | 100 Lb final RQ; 45.4 kg final RQ |
|------------------------|-----------|-----------------------------------|

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

Potassium permanganate: 100.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

| | |
|--------------------------|--|
| Hazard categories | Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - Yes |
|--------------------------|--|

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Not available

WHMIS status Controlled

WHMIS classification Class C - Oxidizing Material, Class E - Corrosive Material

WHMIS labeling



State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Potassium permanganate 7722-64-7 Present

U.S. - Louisiana - Reportable Quantity List for Pollutants

Potassium permanganate 7722-64-7 100 Lb final RQ; 45.4 kg final RQ

U.S. - Massachusetts - Right To Know List

Potassium permanganate 7722-64-7 Present

U.S. - New Jersey - Right to Know Hazardous Substance List

Potassium permanganate 7722-64-7 sn 1578

U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

Potassium permanganate 7722-64-7 100 Lb RQ (air); 100 lb RQ (land/water)

U.S. - Pennsylvania - RTK (Right to Know) List

Potassium permanganate 7722-64-7 Environmental hazard

U.S. - Rhode Island - Hazardous Substance List

Potassium permanganate 7722-64-7 Flammable

Inventory name

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Issue date

15-Apr-2010

Effective date

01-Apr-2010

Expiry date

01-Apr-2013

Prepared by

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Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.