## SECTION 1: Identification

### 1.1. Identification

- **Product form**: Mixtures
- **Product name**: Potassium Permanganate, 5% w/v
- **Product code**: LC19940

### 1.2. Recommended use and restrictions on use

- **Use of the substance/mixture**: For laboratory and manufacturing use only.
- **Recommended use**: Laboratory chemicals
- **Restrictions on use**: Not for food, drug or household use

### 1.3. Supplier

LabChem Inc  
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court  
Zelienople, PA 16063 - USA  
T 412-826-5230 - F 724-473-0647  
info@labchem.com - www.labchem.com

### 1.4. Emergency telephone number

- **Emergency number**: CHEMTREC: 1-800-424-9300 or 011-703-527-3887

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

#### GHS-US classification

| Hazardous to the aquatic environment - Acute | H401   | Toxic to aquatic life |
| Hazardous to the aquatic environment - Chronic | H411   | Toxic to aquatic life with long lasting effects |

Full text of H statements: see section 16

### 2.2. GHS Label elements, including precautionary statements

#### GHS-US labeling

- **Hazard pictograms (GHS-US)**: [Image]

- **Hazard statements (GHS-US)**: H411 - Toxic to aquatic life with long lasting effects

- **Precautionary statements (GHS-US)**:  
  - P273 - Avoid release to the environment.  
  - P391 - Collect spillage.  
  - P501 - Dispose of contents/container to comply with local, state and federal regulations

### 2.3. Other hazards which do not result in classification

- **Other hazards not contributing to the classification**: None under normal conditions.

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Not applicable
SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary

Obtain medical assistance.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media


Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Safety glasses. Gloves.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
Potassium Permanganate, 5% w/v
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7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Light sensitive. Keep container closed when not in use.
Incompatible products: Strong reducing agents. Strong bases.
Incompatible materials: Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th></th>
<th>ACGIH TWA (mg/m³)</th>
<th>OSHA PEL (Ceiling) (mg/m³)</th>
<th>US IDLH (mg/m³)</th>
<th>NIOSH REL (TWA) (mg/m³)</th>
<th>NIOSH REL (ceiling) (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Permanganate</td>
<td>0.1 mg/m³</td>
<td>5 mg/m³</td>
<td>500 mg/m³</td>
<td>1 mg/m³</td>
<td>3 mg/m³</td>
</tr>
<tr>
<td>(7722-64-7)</td>
<td></td>
<td>(Manganese, inorganic compounds, as Mn; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2. Appropriate engineering controls
Appropriate engineering controls: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

8.3. Individual protection measures/Personal protective equipment
Personal protective equipment:
Gloves. Safety glasses.

Hand protection:
Wear protective gloves.

Eye protection:
Chemical goggles or safety glasses

Respiratory protection:
Respiratory protection not required in normal conditions

Other information:
Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Purple</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
</tbody>
</table>
**Potassium Permanganate, 5% w/v**

**Safety Data Sheet**

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non flammable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific gravity / density</td>
<td>1 g/ml</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

No additional information available

**SECTION 10: Stability and reactivity**

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions. Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong reducing agents. Strong bases.

10.6. Hazardous decomposition products

manganese, oxygen.

**SECTION 11: Toxicological information**

11.1. Information on toxicological effects

Likely routes of exposure : Skin and eye contact

Acute toxicity : Not classified

<table>
<thead>
<tr>
<th>Source</th>
<th>LD50 oral rat</th>
<th>ATE US (oral)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Permanganate (7722-64-7)</td>
<td>1090 mg/kg (Rat)</td>
<td>1090 mg/kg body weight</td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
<td>≥ 90000 mg/kg</td>
<td>90000 mg/kg body weight</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified
Potassium Permanganate, 5% w/v
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Specific target organ toxicity – repeated exposure: Not classified
Aspiration hazard: Not classified
Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - water: Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Potassium Permanganate (7722-64-7)
EC50 Daphnia 1 0.235 mg/l (EC50; 24 h)
LC50 fish 2 1.22 mg/l (LC50; 96 h)
Threshold limit algae 1 10 mg/l (EC50; 4 h)

12.2. Persistence and degradability
Potassium Permanganate, 5% w/v
Persistence and degradability: May cause long-term adverse effects in the environment.

Potassium Permanganate (7722-64-7)
Persistence and degradability: Biodegradability: not applicable.
Biochemical oxygen demand (BOD): Not applicable
Chemical oxygen demand (COD): Not applicable
ThOD: Not applicable

Water (7732-18-5)
Persistence and degradability: Not established.

12.3. Bioaccumulative potential
Potassium Permanganate, 5% w/v
Bioaccumulative potential: Not established.

Potassium Permanganate (7722-64-7)
Log Pow: -1.73 (Estimated value)
Bioaccumulative potential: Bioaccumulation: not applicable.

Water (7732-18-5)
Bioaccumulative potential: Not established.

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods
Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with local, state and federal regulations.

Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not regulated
SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS-No.</th>
<th>Reportable Quantity (RQ)</th>
<th>SARA Section 311/312 Hazard Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Permanganate</td>
<td>7722-64-7</td>
<td>100 lb</td>
<td>Reactive hazard</td>
</tr>
</tbody>
</table>

15.2. International regulations

CANADA

Potassium Permanganate (7722-64-7)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Potassium Permanganate (7722-64-7)

Listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date : 02/13/2018
Other information : None.

Full text of H-phrases: see section 16:

<table>
<thead>
<tr>
<th>H-Phrase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H272</td>
<td>May intensify fire; oxidizer</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life</td>
</tr>
<tr>
<td>H401</td>
<td>Toxic to aquatic life</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects</td>
</tr>
<tr>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.
Potassium Permanganate, 5% w/v
Safety Data Sheet

Hazard Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT
react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : B
B - Safety glasses, Gloves

SDS US LabChem

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