

# Safety Data Sheet

in accordance with HSNO

Revision: 02 January 2020

## 1 Identification of the substance or mixture and of the supplier

- **Product identifier**
- **Trade name:** Potassium Permanganate, 0.1N
- **Product code:** PP1385SS
- **Recommended use:** Laboratory chemicals
- **Restrictions on use:** No further relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
AquaPhoenix Scientific, Inc.  
860 Gitts Run Road  
Hanover, PA 17331 USA  
Phone: (717)632-1291  
Toll-Free: (866)632-1291  
info@aquaphoenixsci.com
- **Emergency telephone number:**  
ChemTel Inc.  
1-800-526-4727 (North America)  
1-314-985-1511 (International)  
Emergencies within Australia - 131126 (NSW Poison Control Centre)  
Emergencies within New Zealand - 0800 764 766 (National Poison Control Centre)

## 2 Hazards identification

- **Classification (Australia, New Zealand)**  
New Zealand HSNO - Hazardous (Classified according to the Minimum Degrees of Hazard Regulations 2001)
- **Hazard pictograms** None.
- **Signal word** Warning
- **Hazard statements**  
H402 Harmful to aquatic life.  
H412 Harmful to aquatic life with long lasting effects.  
H423 Harmful to the soil environment.
- **Precautionary statements**  
P273 Avoid release to the environment.  
P391 Collect spillage.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards** There are no other hazards not otherwise classified that have been identified.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## 3 Composition/Information on ingredients

- **Chemical characterisation: Mixtures**

### · Components:

7722-64-7	Permanganic acid, potassium salt Ox. Sol. 2, H272 Repr. 2, H361; STOT RE 1, H372-H373	<0.5%
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	Skin Corr. 1C, H314; Eye Dam. 1, H318 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	
7732-18-5	Water	>99%

· **Additional information:** For the wording of the listed Hazard Statements refer to section 16.

## 4 First aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Rinse with warm water.  
If skin irritation is experienced, consult a doctor.
- **After eye contact:**  
Remove contact lenses if worn.  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting; call for medical help immediately.
- **Most important symptoms and effects, both acute and delayed**  
Gastric or intestinal disorders when ingested.
- **Hazards:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** No further relevant information available.
- **Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.  
Substance/product is oxidising when dry.
- **Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
For large spills, wear protective clothing.
- **Environmental precautions**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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- **Methods and material for containment and cleaning up**

Wipe up small spills with paper towel and discard.

For larger spills, add sawdust, chalk or other inert binding material, then sweep up and discard.

Dispose of the material collected according to regulations.

- **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and storage

- **Handling:**

- **Precautions for safe handling**

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

- **Information about fire - and explosion protection:** Substance/product is oxidising when dry.

- **Conditions for safe storage, including any incompatibilities**

- **Requirements to be met by storerooms and receptacles:** Avoid storage near extreme heat.

- **Information about storage in one common storage facility:**

Store away from foodstuffs.

Do not store together with acids.

- **Further information about storage conditions:** Keep container tightly sealed.

- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Exposure controls**

- **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

- **Respiratory protection:** Not required under normal conditions of use.

- **Protection of hands:**



Protective gloves

- **Material of gloves**

Nitrile rubber, NBR

Neoprene gloves

Butyl rubber, BR

Natural rubber, NR

Sensibilisation by the components in the glove materials is possible.

- **Eye protection:**

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Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- **Body protection:** Protection may be required for spills.
- **Limitation and supervision of exposure into the environment:** No special requirements.
- **Risk management measures:** No special requirements.

## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · Appearance

- |                    |                 |
|--------------------|-----------------|
| Form:              | Liquid          |
| Colour:            | Light           |
| · Odour:           | Odourless       |
| · Odour threshold: | Not determined. |

- |  |                 |
|--|-----------------|
| · pH-value:                                | Not determined. |
| · Melting point/freezing point:            | 0 °C            |
| · Initial boiling point and boiling range: | 100 °C          |

- |                |                               |
|----------------|-------------------------------|
| · Flash point: | The product is not flammable. |
|----------------|-------------------------------|

- |                              |                 |
|------------------------------|-----------------|
| · Flammability (solid, gas): | Not applicable. |
|------------------------------|-----------------|

- |                                   |                 |
|-----------------------------------|-----------------|
| · Auto/Self-ignition temperature: | Not determined. |
|-----------------------------------|-----------------|

- |                              |                 |
|------------------------------|-----------------|
| · Decomposition temperature: | Not determined. |
|------------------------------|-----------------|

- |                         |   |
|-------------------------|---|
| · Explosive properties: | Product does not present an explosion hazard. |
|-------------------------|---|

#### · Explosion limits

- |        |                 |
|--------|-----------------|
| Lower: | Not determined. |
| Upper: | Not determined. |

- |                        |                |
|------------------------|----------------|
| · Oxidising properties | Non-oxidising. |
|------------------------|----------------|

- |                             |        |
|-----------------------------|--------|
| · Vapour pressure at 20 °C: | 23 hPa |
|-----------------------------|--------|

- |                     |                        |
|---------------------|------------------------|
| · Density at 20 °C: | 1.01 g/cm <sup>3</sup> |
| · Relative density: | Not determined.        |
| · Vapour density:   | Not determined.        |
| · Evaporation rate: | Not determined.        |

- |   |                 |
|---|-----------------|
| · Solubility in / Miscibility with water: | Fully miscible. |
|---|-----------------|

- |   |                 |
|---|-----------------|
| · Partition coefficient: n-octanol/water: | Not determined. |
|---|-----------------|

#### · Viscosity

- |            |                 |
|------------|-----------------|
| Dynamic:   | Not determined. |
| Kinematic: | Not determined. |

- |                     |  |
|---------------------|--|
| · Other information | No further relevant information available. |
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## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**  
Reacts with strong acids and oxidising agents.  
Reacts with certain metals.  
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials** No further relevant information available.
- **Hazardous decomposition products**  
Under fire conditions only:  
Toxic metal oxide smoke

## 11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity:** Based on available data, the classification criteria are not met.
  - **LD/LC50 values relevant for classification:**
- |   |      |                  |
|---|------|------------------|
| <b>7722-64-7 potassium permanganate</b> |      |                  |
| Oral                                    | LD50 | 1090 mg/kg (rat) |
- **Primary irritant effect**
  - **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.
  - **Serious eye damage/irritation:** Based on available data, the classification criteria are not met.
  - **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.

- **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.
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- **Probable routes of exposure:**  
Ingestion.  
Inhalation.  
Eye contact.  
Skin contact.
- **Acute effects (acute toxicity, irritation and corrosivity):** No further relevant information available.
- **Repeated dose toxicity:** No further relevant information available.
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:**

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Harmful to aquatic life with long lasting effects.

**7722-64-7 potassium permanganate**

LC50 0.47 mg/l (fish)

EC50 0.06 mg/l (daphnia)

- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.  
Harmful to aquatic organisms  
Harmful in the soil environment.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation**  
Smaller quantities can be disposed of with household waste.  
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

**14 Transport information**

- |                                       |                 |
|---------------------------------------|-----------------|
| · <b>UN-Number</b>                    |                 |
| · <b>DOT, ADR/RID/ADN, IMDG, IATA</b> | Not Regulated   |
| · <b>UN proper shipping name</b>      |                 |
| · <b>DOT, ADR/RID/ADN, IMDG, IATA</b> | Not Regulated   |
| · <b>Transport hazard class(es)</b>   |                 |
| · <b>DOT, ADR/RID/ADN, IMDG, IATA</b> |                 |
| · <b>Class</b>                        | Not Regulated   |
| · <b>Packing group</b>                |                 |
| · <b>DOT, ADR/RID/ADN, IMDG, IATA</b> | Not Regulated   |
| · <b>Environmental hazards:</b>       | Not applicable. |
| · <b>Special precautions for user</b> | Not applicable. |

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- **Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients are listed.

- **Australia**

- **Australian Inventory of Chemical Substances**

All ingredients are listed.

- **Standard for the Uniform Scheduling of Medicines and Poisons**

None of the ingredients are listed.

- **New Zealand Inventory of Chemicals (NZIOC)**

All ingredients are listed.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulable, Toxic

vPvB: very Persistent and very Bioaccumulative

Ox. Sol. 2: Oxidizing solids – Category 2

Acute Tox. 4: Acute toxicity - oral – Category 4

Skin Corr. 1C: Skin corrosion/irritation – Category 1C

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Repr. 2: Reproductive toxicity – Category 2

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

- **Sources**

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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