

# Rowe Scientific Potassium Permanganate Solution <1%

## ROWE SCIENTIFIC

Chemwatch: 27-3614

Version No: 7.1

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Chemwatch Hazard Alert Code: 1

Issue Date: 06/12/2023

Print Date: 06/12/2023

L.GHS.AUS.EN.E

### SECTION 1 Identification of the substance / mixture and of the company / undertaking

#### Product Identifier

|                               |                                                     |
|-------------------------------|-----------------------------------------------------|
| Product name                  | Rowe Scientific Potassium Permanganate Solution <1% |
| Chemical Name                 | Not Applicable                                      |
| Synonyms                      | CP4670, CP4674, CP4683                              |
| Chemical formula              | Not Applicable                                      |
| Other means of identification | Not Available                                       |

#### Relevant identified uses of the substance or mixture and uses advised against

|                          |                                                                    |
|--------------------------|--------------------------------------------------------------------|
| Relevant identified uses | Laboratory reagent.<br>Use according to manufacturer's directions. |
|--------------------------|--------------------------------------------------------------------|

#### Details of the manufacturer or supplier of the safety data sheet

|                         |                                                       |
|-------------------------|-------------------------------------------------------|
| Registered company name | ROWE SCIENTIFIC                                       |
| Address                 | 11 Challenge Boulevard Wangara WA 6065 Australia      |
| Telephone               | +61 8 9302 1911                                       |
| Fax                     | +61 8 9302 1905                                       |
| Website                 | <a href="http://rowe.com.au/">http://rowe.com.au/</a> |
| Email                   | rowewa@rowe.com.au                                    |

#### Emergency telephone number

|                                   |                          |
|-----------------------------------|--------------------------|
| Association / Organisation        | ROWE SCIENTIFIC          |
| Emergency telephone numbers       | +61 8 9302 1911 (24 Hrs) |
| Other emergency telephone numbers | Not Available            |

### SECTION 2 Hazards identification

#### Classification of the substance or mixture

|                    |                                                                                                                                     |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Poisons Schedule   | Not Applicable                                                                                                                      |
| Classification [1] | Hazardous to the Aquatic Environment Long-Term Hazard Category 3                                                                    |
| Legend:            | 1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI |

#### Label elements

|                     |                |
|---------------------|----------------|
| Hazard pictogram(s) | Not Applicable |
| Signal word         | Not Applicable |

#### Hazard statement(s)

|      |                                                    |
|------|----------------------------------------------------|
| H412 | Harmful to aquatic life with long lasting effects. |
|------|----------------------------------------------------|

#### Precautionary statement(s) Prevention

|      |                                   |
|------|-----------------------------------|
| P273 | Avoid release to the environment. |
|------|-----------------------------------|

#### Precautionary statement(s) Response

Not Applicable

#### Precautionary statement(s) Storage

Not Applicable

#### Precautionary statement(s) Disposal

|      |                                                                                                                                  |
|------|----------------------------------------------------------------------------------------------------------------------------------|
| P501 | Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation. |
|------|----------------------------------------------------------------------------------------------------------------------------------|

### SECTION 3 Composition / information on ingredients

## Rowe Scientific Potassium Permanganate Solution &lt;1%

## Substances

See section below for composition of Mixtures

## Mixtures

| CAS No                                                                                                                                                                                                      | %[weight] | Name                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------|
| 7722-64-7                                                                                                                                                                                                   | 0.316     | <u>potassium permanganate</u> |
| 7732-18-5                                                                                                                                                                                                   | >99       | <u>water</u>                  |
| <b>Legend:</b> 1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L; * EU IOELVs available |           |                               |

## SECTION 4 First aid measures

## Description of first aid measures

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye Contact</b>  | If this product comes in contact with eyes: <ul style="list-style-type: none"><li>▶ Wash out immediately with water.</li><li>▶ If irritation continues, seek medical attention.</li><li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li></ul>                                                                                                                                                                                                                                                                               |
| <b>Skin Contact</b> | If skin or hair contact occurs: <ul style="list-style-type: none"><li>▶ Flush skin and hair with running water (and soap if available).</li><li>▶ Seek medical attention in event of irritation.</li></ul>                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Inhalation</b>   | <ul style="list-style-type: none"><li>▶ If fumes or combustion products are inhaled remove from contaminated area.</li><li>▶ Lay patient down. Keep warm and rested.</li><li>▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li><li>▶ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li><li>▶ Transport to hospital, or doctor.</li></ul>                     |
| <b>Ingestion</b>    | <ul style="list-style-type: none"><li>▶ <b>If swallowed do NOT induce vomiting.</b></li><li>▶ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li><li>▶ Observe the patient carefully.</li><li>▶ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li><li>▶ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li><li>▶ Seek medical advice.</li></ul> |

## Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5 Firefighting measures

## Extinguishing media

- ▶ There is no restriction on the type of extinguisher which may be used.

## Special hazards arising from the substrate or mixture

|                             |            |
|-----------------------------|------------|
| <b>Fire Incompatibility</b> | None known |
|-----------------------------|------------|

## Advice for firefighters

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Fire Fighting</b>         | <ul style="list-style-type: none"><li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li><li>▶ Wear breathing apparatus plus protective gloves in the event of a fire.</li><li>▶ Prevent, by any means available, spillage from entering drains or water courses.</li><li>▶ Use fire fighting procedures suitable for surrounding area.</li><li>▶ <b>DO NOT</b> approach containers suspected to be hot.</li><li>▶ Cool fire exposed containers with water spray from a protected location.</li><li>▶ If safe to do so, remove containers from path of fire.</li><li>▶ Equipment should be thoroughly decontaminated after use.</li></ul> |
| <b>Fire/Explosion Hazard</b> | <ul style="list-style-type: none"><li>▶ Non combustible.</li><li>▶ Not considered a significant fire risk, however containers may burn.</li></ul> Heating may cause expansion or decomposition leading to violent rupture of containers                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>HAZCHEM</b>               | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## SECTION 6 Accidental release measures

## Personal precautions, protective equipment and emergency procedures

See section 8

## Environmental precautions

See section 12

## Methods and material for containment and cleaning up

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Minor Spills</b> | <ul style="list-style-type: none"><li>▶ Clean up all spills immediately.</li><li>▶ Avoid breathing vapours and contact with skin and eyes.</li><li>▶ Control personal contact with the substance, by using protective equipment.</li><li>▶ Contain and absorb spill with sand, earth, inert material or vermiculite.</li><li>▶ Wipe up.</li><li>▶ Place in a suitable, labelled container for waste disposal.</li></ul> |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Rowe Scientific Potassium Permanganate Solution <1%

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Major Spills | <div>Minor hazard.</div> <div><div>▶ Clear area of personnel.</div><div>▶ Alert Fire Brigade and tell them location and nature of hazard.</div><div>▶ Control personal contact with the substance, by using protective equipment as required.</div><div>▶ Prevent spillage from entering drains or water ways.</div><div>▶ Contain spill with sand, earth or vermiculite.</div><div>▶ Collect recoverable product into labelled containers for recycling.</div><div>▶ Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal.</div><div>▶ Wash area and prevent runoff into drains or waterways.</div><div>▶ If contamination of drains or waterways occurs, advise emergency services.</div></div> |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safe handling     | <div><div>▶ Limit all unnecessary personal contact.</div><div>▶ Wear protective clothing when risk of exposure occurs.</div><div>▶ Use in a well-ventilated area.</div><div>▶ When handling DO NOT eat, drink or smoke.</div><div>▶ Always wash hands with soap and water after handling.</div><div>▶ Avoid physical damage to containers.</div><div>▶ Use good occupational work practice.</div><div>▶ Observe manufacturer's storage and handling recommendations contained within this SDS.</div></div> |
| Other information | <div><div>▶ Protect from light.</div><div>▶ Store in original containers.</div><div>▶ Keep containers securely sealed.</div><div>▶ Store in a cool, dry, well-ventilated area.</div><div>▶ Store away from incompatible materials and foodstuff containers.</div><div>▶ Protect containers against physical damage and check regularly for leaks.</div><div>▶ Observe manufacturer's storage and handling recommendations contained within this SDS.</div></div>                                           |

Conditions for safe storage, including any incompatibilities

|                         |                                                                                                           |
|-------------------------|-----------------------------------------------------------------------------------------------------------|
| Suitable container      | <div><div>▶ Glass container is suitable for laboratory quantities</div><div>Plastic container</div></div> |
| Storage incompatibility | None known                                                                                                |

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

| Source                       | Ingredient             | Material name                       | TWA     | STEL          | Peak          | Notes         |
|------------------------------|------------------------|-------------------------------------|---------|---------------|---------------|---------------|
| Australia Exposure Standards | potassium permanganate | Manganese, dust & compounds (as Mn) | 1 mg/m3 | Not Available | Not Available | Not Available |

Emergency Limits

| Ingredient             | TEEL-1    | TEEL-2   | TEEL-3    |
|------------------------|-----------|----------|-----------|
| potassium permanganate | 8.6 mg/m3 | 14 mg/m3 | 150 mg/m3 |

| Ingredient             | Original IDLH | Revised IDLH  |
|------------------------|---------------|---------------|
| potassium permanganate | 500 mg/m3     | Not Available |
| water                  | Not Available | Not Available |

MATERIAL DATA

None assigned. Refer to individual constituents.

Exposure controls

|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appropriate engineering controls                                      | <div>General exhaust is adequate under normal operating conditions.</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Individual protection measures, such as personal protective equipment | <div><div></div><div></div><div></div><div></div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Eye and face protection                                               | <div><div>▶ Safety glasses with side shields; or as required,</div><div>▶ Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent]</div><div>▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].</div></div> |
| Skin protection                                                       | <div>See Hand protection below</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

Rowe Scientific Potassium Permanganate Solution <1%

|                       |                                                                     |
|-----------------------|---------------------------------------------------------------------|
| Hands/feet protection | Wear chemical protective gloves, e.g. PVC.<br>Wear safety footwear. |
| Body protection       | See Other protection below                                          |
| Other protection      | <div>▸ Overalls.<br/>▸ Eyewash unit.</div>                          |

Recommended material(s)

**GLOVE SELECTION INDEX**

Glove selection is based on a modified presentation of the: **"Forsberg Clothing Performance Index"**.  
The effect(s) of the following substance(s) are taken into account in the **computer-generated** selection:  
Rowe Scientific Potassium Permanganate Solution <1%

| Material       | CPI |
|----------------|-----|
| BUTYL          | A   |
| NEOPRENE       | A   |
| VITON          | A   |
| NATURAL RUBBER | C   |
| PVA            | C   |

\* CPI - Chemwatch Performance Index  
A: Best Selection  
B: Satisfactory; may degrade after 4 hours continuous immersion  
C: Poor to Dangerous Choice for other than short term immersion  
**NOTE:** As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -  
\* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Ansell Glove Selection

|                                    |
|------------------------------------|
| Glove — In order of recommendation |
| AlphaTec 02-100                    |
| AlphaTec® Solvex® 37-185           |
| AlphaTec® 38-612                   |
| AlphaTec® 58-008                   |
| AlphaTec® 58-530B                  |
| AlphaTec® 58-530W                  |
| AlphaTec® 58-735                   |
| AlphaTec® 79-700                   |
| AlphaTec® Solvex® 37-675           |
| DermaShield™ 73-711                |

The suggested gloves for use should be confirmed with the glove supplier.

Respiratory protection

Type -P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.  
Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

| Required Minimum Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator |
|------------------------------------|----------------------|----------------------|------------------------|
| up to 10 x ES                      | -AUS P2              | -                    | -PAPR-AUS / Class 1 P2 |
| up to 50 x ES                      | -                    | -AUS / Class 1 P2    | -                      |
| up to 100 x ES                     | -                    | -2 P2                | -PAPR-2 P2 ^           |

^ - Full-face  
A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

|                                              |                                                  |                                         |                |
|----------------------------------------------|--------------------------------------------------|-----------------------------------------|----------------|
| Appearance                                   | Clear odourless purple liquid; mixes with water. |                                         |                |
| Physical state                               | Liquid                                           | Relative density (Water = 1)            | 1.0            |
| Odour                                        | Not Available                                    | Partition coefficient n-octanol / water | Not Available  |
| Odour threshold                              | Not Available                                    | Auto-ignition temperature (°C)          | Not Applicable |
| pH (as supplied)                             | Not Available                                    | Decomposition temperature (°C)          | Not Available  |
| Melting point / freezing point (°C)          | Not Available                                    | Viscosity (cSt)                         | Not Available  |
| Initial boiling point and boiling range (°C) | 100                                              | Molecular weight (g/mol)                | Not Applicable |
| Flash point (°C)                             | Not Applicable                                   | Taste                                   | Not Available  |
| Evaporation rate                             | As for water                                     | Explosive properties                    | Not Available  |
| Flammability                                 | Not Applicable                                   | Oxidising properties                    | Not Available  |
| Upper Explosive Limit (%)                    | Not Applicable                                   | Surface Tension (dyn/cm or mN/m)        | Not Available  |
| Lower Explosive Limit (%)                    | Not Applicable                                   | Volatile Component (%vol)               | >99 (water)    |
| Vapour pressure (kPa)                        | 2.3 @ 20C                                        | Gas group                               | Not Available  |

Rowe Scientific Potassium Permanganate Solution <1%

|                          |               |                       |                |
|--------------------------|---------------|-----------------------|----------------|
| Solubility in water      | Miscible      | pH as a solution (1%) | Not Available  |
| Vapour density (Air = 1) | Not Available | VOC g/L               | Not Applicable |

SECTION 10 Stability and reactivity

|                                    |                                                                           |
|------------------------------------|---------------------------------------------------------------------------|
| Reactivity                         | See section 7                                                             |
| Chemical stability                 | Product is considered stable and hazardous polymerisation will not occur. |
| Possibility of hazardous reactions | See section 7                                                             |
| Conditions to avoid                | See section 7                                                             |
| Incompatible materials             | See section 7                                                             |
| Hazardous decomposition products   | See section 5                                                             |

SECTION 11 Toxicological information

Information on toxicological effects

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                      |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Inhaled                                             | Not normally a hazard due to non-volatile nature of product                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                      |
| Ingestion                                           | The material has <b>NOT</b> been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern. |                                                                                                                      |
| Skin Contact                                        | The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                      |
| Eye                                                 | Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                      |
| Chronic                                             | Long-term exposure to the product is not thought to produce chronic effects adverse to health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                      |
| Rowe Scientific Potassium Permanganate Solution <1% | TOXICITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | IRRITATION                                                                                                           |
|                                                     | Not Available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Not Available                                                                                                        |
| potassium permanganate                              | TOXICITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | IRRITATION                                                                                                           |
|                                                     | dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup><br>Oral (Rat) LD50: 1090 mg/kg <sup>[2]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Eye: adverse effect observed (irritating) <sup>[1]</sup><br>Skin: adverse effect observed (corrosive) <sup>[1]</sup> |
| water                                               | TOXICITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | IRRITATION                                                                                                           |
|                                                     | Oral (Rat) LD50: >90000 mg/kg <sup>[2]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Not Available                                                                                                        |
| Legend:                                             | 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                      |

|                                   |                                                                                    |                          |   |
|-----------------------------------|------------------------------------------------------------------------------------|--------------------------|---|
| POTASSIUM PERMANGANATE            | Dyspnae, nausea, effects on spermatogenesis and the male fertility index recorded. |                          |   |
| WATER                             | No significant acute toxicological data identified in literature search.           |                          |   |
| Acute Toxicity                    | ✗                                                                                  | Carcinogenicity          | ✗ |
| Skin Irritation/Corrosion         | ✗                                                                                  | Reproductivity           | ✗ |
| Serious Eye Damage/Irritation     | ✗                                                                                  | STOT - Single Exposure   | ✗ |
| Respiratory or Skin sensitisation | ✗                                                                                  | STOT - Repeated Exposure | ✗ |
| Mutagenicity                      | ✗                                                                                  | Aspiration Hazard        | ✗ |

Legend: ✗ – Data either not available or does not fill the criteria for classification  
✔ – Data available to make classification

SECTION 12 Ecological information

Toxicity

|                                                     |               |                    |               |               |               |
|-----------------------------------------------------|---------------|--------------------|---------------|---------------|---------------|
| Rowe Scientific Potassium Permanganate Solution <1% | Endpoint      | Test Duration (hr) | Species       | Value         | Source        |
|                                                     | Not Available | Not Available      | Not Available | Not Available | Not Available |
| potassium permanganate                              | Endpoint      | Test Duration (hr) | Species       | Value         | Source        |
|                                                     | BCF           | 672h               | Fish          | <8            | 7             |

Rowe Scientific Potassium Permanganate Solution <1%

|         |                                                                                                                                                                                                                                                                                                                          |                    |                               |                 |               |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------------|-----------------|---------------|
|         | EC50                                                                                                                                                                                                                                                                                                                     | 72h                | Algae or other aquatic plants | 0.41-0.62mg/l   | 4             |
|         | EC50                                                                                                                                                                                                                                                                                                                     | 48h                | Crustacea                     | 0.06mg/l        | 2             |
|         | NOEC(ECx)                                                                                                                                                                                                                                                                                                                | 336h               | Fish                          | 0.000196mg/l    | 4             |
|         | LC50                                                                                                                                                                                                                                                                                                                     | 96h                | Fish                          | 0.286-0.438mg/l | 4             |
| water   | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value           | Source        |
|         | Not Available                                                                                                                                                                                                                                                                                                            | Not Available      | Not Available                 | Not Available   | Not Available |
| Legend: | Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data |                    |                               |                 |               |

DO NOT discharge into sewer or waterways.

Persistence and degradability

|                        |                         |                  |
|------------------------|-------------------------|------------------|
| Ingredient             | Persistence: Water/Soil | Persistence: Air |
| potassium permanganate | HIGH                    | HIGH             |
| water                  | LOW                     | LOW              |

Bioaccumulative potential

|                        |                 |
|------------------------|-----------------|
| Ingredient             | Bioaccumulation |
| potassium permanganate | LOW (BCF = 81)  |

Mobility in soil

|                        |                   |
|------------------------|-------------------|
| Ingredient             | Mobility          |
| potassium permanganate | LOW (KOC = 48.64) |

SECTION 13 Disposal considerations

Waste treatment methods

|                              |                                                                                                                                                                                                                                                                                                                               |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product / Packaging disposal | <ul style="list-style-type: none"><li>Recycle wherever possible or consult manufacturer for recycling options.</li><li>Consult State Land Waste Management Authority for disposal.</li><li>Bury residue in an authorised landfill.</li><li>Recycle containers if possible, or dispose of in an authorised landfill.</li></ul> |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

SECTION 14 Transport information

Labels Required

|                  |                |
|------------------|----------------|
| Marine Pollutant | NO             |
| HAZCHEM          | Not Applicable |

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

|                        |               |
|------------------------|---------------|
| Product name           | Group         |
| potassium permanganate | Not Available |
| water                  | Not Available |

14.7.3. Transport in bulk in accordance with the IGC Code

|                        |               |
|------------------------|---------------|
| Product name           | Ship Type     |
| potassium permanganate | Not Available |
| water                  | Not Available |

SECTION 15 Regulatory information

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

potassium permanganate is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals  
Australian Inventory of Industrial Chemicals (AIIC)

## Rowe Scientific Potassium Permanganate Solution &lt;1%

## water is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

## Additional Regulatory Information

Not Applicable

## National Inventory Status

| National Inventory                              | Status                                                                                                                                                                                            |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Australia - AIIC / Australia Non-Industrial Use | Yes                                                                                                                                                                                               |
| Canada - DSL                                    | Yes                                                                                                                                                                                               |
| Canada - NDSL                                   | No (potassium permanganate; water)                                                                                                                                                                |
| China - IECSC                                   | Yes                                                                                                                                                                                               |
| Europe - EINEC / ELINCS / NLP                   | Yes                                                                                                                                                                                               |
| Japan - ENCS                                    | Yes                                                                                                                                                                                               |
| Korea - KECI                                    | Yes                                                                                                                                                                                               |
| New Zealand - NZIoC                             | Yes                                                                                                                                                                                               |
| Philippines - PICCS                             | Yes                                                                                                                                                                                               |
| USA - TSCA                                      | Yes                                                                                                                                                                                               |
| Taiwan - TCSI                                   | Yes                                                                                                                                                                                               |
| Mexico - INSQ                                   | Yes                                                                                                                                                                                               |
| Vietnam - NCI                                   | Yes                                                                                                                                                                                               |
| Russia - FBEPH                                  | Yes                                                                                                                                                                                               |
| <b>Legend:</b>                                  | Yes = All CAS declared ingredients are on the inventory<br>No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration. |

## SECTION 16 Other information

|                      |            |
|----------------------|------------|
| <b>Revision Date</b> | 06/12/2023 |
| <b>Initial Date</b>  | 01/11/2009 |

## SDS Version Summary

| Version | Date of Update | Sections Updated                                                                 |
|---------|----------------|----------------------------------------------------------------------------------|
| 6.1     | 23/12/2022     | Classification review due to GHS Revision change.                                |
| 7.1     | 06/12/2023     | Identification of the substance / mixture and of the company / undertaking - Use |

## Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

## Definitions and abbreviations

- ▶ PC - TWA: Permissible Concentration-Time Weighted Average
- ▶ PC - STEL: Permissible Concentration-Short Term Exposure Limit
- ▶ IARC: International Agency for Research on Cancer
- ▶ ACGIH: American Conference of Governmental Industrial Hygienists
- ▶ STEL: Short Term Exposure Limit
- ▶ TEEL: Temporary Emergency Exposure Limit
- ▶ IDLH: Immediately Dangerous to Life or Health Concentrations
- ▶ ES: Exposure Standard
- ▶ OSF: Odour Safety Factor
- ▶ NOAEL: No Observed Adverse Effect Level
- ▶ LOAEL: Lowest Observed Adverse Effect Level
- ▶ TLV: Threshold Limit Value
- ▶ LOD: Limit Of Detection
- ▶ OTV: Odour Threshold Value
- ▶ BCF: BioConcentration Factors
- ▶ BEI: Biological Exposure Index
- ▶ DNEL: Derived No-Effect Level
- ▶ PNEC: Predicted no-effect concentration
  
- ▶ AIIC: Australian Inventory of Industrial Chemicals
- ▶ DSL: Domestic Substances List
- ▶ NDSL: Non-Domestic Substances List
- ▶ IECSC: Inventory of Existing Chemical Substance in China
- ▶ EINECS: European Inventory of Existing Commercial chemical Substances
- ▶ ELINCS: European List of Notified Chemical Substances
- ▶ NLP: No-Longer Polymers
- ▶ ENCS: Existing and New Chemical Substances Inventory
- ▶ KECI: Korea Existing Chemicals Inventory
- ▶ NZIoC: New Zealand Inventory of Chemicals
- ▶ PICCS: Philippine Inventory of Chemicals and Chemical Substances

Continued...

**Rowe Scientific Potassium Permanganate Solution <1%**

- ▶ TSCA: Toxic Substances Control Act
- ▶ TCSI: Taiwan Chemical Substance Inventory
- ▶ INSQ: Inventario Nacional de Sustancias Químicas
- ▶ NCI: National Chemical Inventory
- ▶ FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

This document is copyright.

Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH.

TEL (+61 3) 9572 4700.