

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate $\geq 99\%$, p.a., ACS

article number: **P752**
Version: **GHS 3.0 en**
Replaces version of: 2021-03-03
Version: (GHS 2)

date of compilation: 2019-02-08
Revision: 2024-03-04

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

1.1 Product identifier

Identification of the substance **Potassium permanganate $\geq 99\%$, p.a., ACS**
Article number P752
CAS number 7722-64-7

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

Relevant identified uses: Laboratory chemical
Laboratory and analytical use
Uses advised against: Do not use for products which come into direct contact with the skin. Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household). Food, drink and animal feedingstuffs.

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co. KG
Schoemperlenstr. 3-5
D-76185 Karlsruhe
Germany

Telephone: +49 (0) 721 - 56 06 0
Telefax: +49 (0) 721 - 56 06 149
e-mail: sicherheit@carlroth.de
Website: www.carlroth.de

Competent person responsible for the safety data sheet: Department Health, Safety and Environment

e-mail (competent person): sicherheit@carlroth.de

1.4 Emergency telephone number

| Name | Street | Postal code/city | Telephone | Website |
|--|-----------------|--------------------|-----------|---------|
| NSW Poisons Information Centre Childrens Hospital | Hawkesbury Road | 2145 Westmead, NSW | 131126 | |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

| Section | Hazard class | Category | Hazard class and category | Hazard statement |
|---------|---------------------------|----------|---------------------------|------------------|
| 2.14 | Oxidising solid | 2 | Ox. Sol. 2 | H272 |
| 3.10 | Acute toxicity (oral) | 4 | Acute Tox. 4 | H302 |
| 3.2 | Skin corrosion/irritation | 1C | Skin Corr. 1C | H314 |

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate $\geq 99\%$, p.a., ACS

article number: **P752**

| Section | Hazard class | Cat-egory | Hazard class and category | Hazard statement |
|---------|--|-----------|---------------------------|------------------|
| 3.3 | Serious eye damage/eye irritation | 1 | Eye Dam. 1 | H318 |
| 3.7 | Reproductive toxicity | 2 | Repr. 2 | H361d |
| 3.9 | Specific target organ toxicity - repeated exposure | 2 | STOT RE 2 | H373 |

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis. Delayed or immediate effects can be expected after short or long-term exposure.

2.2 Label elements

Labelling

Signal word

Danger

Pictograms

GHS03, GHS05,
GHS07, GHS08



Hazard statements

H272 May intensify fire; oxidiser
H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage
H361d Suspected of damaging the unborn child
H373 May cause damage to organs (brain) through prolonged or repeated exposure (if inhaled)

Precautionary statements

Precautionary statements - prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P260 Do not breathe dusts or mists
P280 Wear eye protection/face protection

Precautionary statements - response

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher for extinction

For professional users only

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate $\geq 99\%$, p.a., ACS

article number: **P752**

2.3 Other hazards

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

| | |
|-------------------|------------------------|
| Name of substance | Potassium permanganate |
| Molecular formula | KMnO_4 |
| Molar mass | 158 g/mol |
| CAS No | 7722-64-7 |

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off immediately all contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

After contact with skin, wash immediately with plenty of water. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

Following eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye.

Following ingestion

Rinse mouth immediately and drink plenty of water. Rinse mouth with water (only if the person is conscious). Call a physician immediately. If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects, Corrosion, Risk of serious damage to eyes, Risk of blindness, Gastric perforation, Nausea, Vomiting, Gastrointestinal complaints, Cough, Dyspnoea

4.3 Indication of any immediate medical attention and special treatment needed

none

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate $\geq 99\%$, p.a., ACS

article number: P752

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings!
water, foam, alcohol resistant foam, dry extinguishing powder, ABC-powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Oxidising property. Non-combustible.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus. Wear full chemical protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe dust.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains. Take up mechanically.

Advice on how to clean up a spill

Take up mechanically. Control of dust.

Other information relating to spills and releases

Place in appropriate containers for disposal.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate $\geq 99\%$, p.a., ACS

article number: P752

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handle and open container with care. Avoid exposure. Avoid dust formation. Clear contaminated areas thoroughly.

Measures to prevent fire as well as aerosol and dust generation

Removal of dust deposits. Keep away from combustible material.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place. Keep container tightly closed. Keep away from combustible material.

Incompatible substances or mixtures

Observe hints for combined storage. Keep/store away from clothing/combustible materials. Take any precaution to avoid mixing with combustibles.

Consideration of other advice:

Ventilation requirements

Use local and general ventilation.

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

| Country | Name of agent | CAS No | Identifier | TWA [mg/m ³] | STEL [mg/m ³] | Ceiling-C [mg/m ³] | Notation | Source |
|---------|---------------------|-----------|------------|--------------------------|---------------------------|--------------------------------|----------|--------|
| AU | nuisance dusts | | WES | 10 | | | i | WES |
| AU | manganese compounds | 7722-64-7 | WES | 1 | | | Mn | WES |

Notation

| | |
|-----------|--|
| Ceiling-C | Ceiling value is a limit value above which exposure should not occur |
| i | Inhalable fraction |
| Mn | Calculated as Mn (manganese) |
| STEL | Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified) |
| TWA | Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified) |

Human health values

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate $\geq 99\%$, p.a., ACS

article number: **P752**

| Relevant DNELs and other threshold levels | | | | |
|---|-----------------------|------------------------------------|-------------------|----------------------------|
| Endpoint | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
| DNEL | 0.2 mg/m ³ | human, inhalatory | worker (industry) | chronic - systemic effects |

Environmental values

| Relevant PNECs and other threshold levels | | | | |
|---|-----------------|-------------------|------------------------------|------------------------------|
| End-point | Threshold level | Organism | Environmental compartment | Exposure time |
| PNEC | 0.06 µg/l | aquatic organisms | freshwater | short-term (single instance) |
| PNEC | 1.64 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection. Wear face protection.

Skin protection



• hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

• type of material

NBR (Nitrile rubber)

• material thickness

>0,11 mm

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate $\geq 99\%$, p.a., ACS

article number: **P752**

Respiratory protection



Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P2 (filters at least 94 % of airborne particles, colour code: White).

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|--|--|
| Physical state | solid |
| Form | crystalline |
| Colour | violet |
| Odour | odourless |
| Melting point/freezing point | >240 °C (slow decomposition) |
| Boiling point or initial boiling point and boiling range | not determined |
| Flammability | non-combustible |
| Lower and upper explosion limit | not determined |
| Flash point | not applicable |
| Auto-ignition temperature | not determined |
| Decomposition temperature | >240 °C (ECHA) |
| pH (value) | 7 – 9 (in aqueous solution: 20 g/l, 20 °C) |
| Kinematic viscosity | not relevant |

Solubility(ies)

Water solubility ≥ 64 g/l at 20 °C (ECHA)

Partition coefficient

Partition coefficient n-octanol/water (log value): -1.73 (calc.)

Vapour pressure <0.01 hPa at 20 °C

Density and/or relative density

Density 2.7 g/cm³ at 20 °C (ECHA)

Relative vapour density Information on this property is not available.

Bulk density 1,300 – 1,600 kg/m³

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate $\geq 99\%$, p.a., ACS

article number: **P752**

Particle characteristics No data available.

Other safety parameters

Oxidising properties oxidiser

9.2 Other information

Information with regard to physical hazard classes: There is no additional information.

Other safety characteristics: There is no additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

It's a reactive substance. Oxidising property.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Exothermic reaction with: Nitric acid, Reducing agents, Ammonium hydroxide, Carbide, Carbon,
Danger of explosion: Ammonia (NH₃), Ammonium compounds, Chlorine, Acetic acid, Acetic anhydride, Metal powder, Nitro compound, Phosphorus, Acid chlorides, inorganic, Sulphur, Sulphuric acid and sulphurous acid,
Risk of ignition: Acetone, Aldehydes, Alcohols, Amines, Combustible materials, Dichloromethane, Ethanol, Ester, Mineral acids, Sulphuric acid, Hydrogen sulphide (H₂S), Hydrogen peroxide, Organic substances

10.4 Conditions to avoid

Keep away from heat. Decomposition takes place from temperatures above: >240 °C.

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to GHS

Acute toxicity

Harmful if swallowed.

GHS of the United Nations, annex 4. May be harmful in contact with skin.

| Acute toxicity | | | | | |
|----------------|----------|--------------|---------|--------|--------|
| Exposure route | Endpoint | Value | Species | Method | Source |
| oral | LD50 | >2,000 mg/kg | rat | | ECHA |
| dermal | LD50 | >2,000 mg/kg | rat | | ECHA |

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate ≥ 99 %, p.a., ACS

article number: **P752**

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Suspected of damaging the unborn child.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

May cause damage to organs (brain) through prolonged or repeated exposure (if inhaled).

| Hazard category | Target organ | Exposure route |
|-----------------|--------------|----------------|
| 2 | brain | if inhaled |

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects), nausea, gastrointestinal complaints

• If in eyes

causes burns, Causes serious eye damage, risk of blindness

• If inhaled

cough, breathing difficulties, Inhalation of dust may cause irritation of the respiratory system

• If on skin

causes severe burns, causes poorly healing wounds

• Other information

Other adverse effects: Liver and kidney damage, Central nervous system

11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate $\geq 99\%$, p.a., ACS

article number: P752

SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

| Aquatic toxicity (acute) | | | | |
|--------------------------|-----------|-----------------------|--------|---------------|
| Endpoint | Value | Species | Source | Exposure time |
| LC50 | 0.47 mg/l | fish | ECHA | 96 h |
| EC50 | 0.06 mg/l | aquatic invertebrates | ECHA | 48 h |
| ErC50 | 0.8 mg/l | algae | ECHA | 72 h |

| Aquatic toxicity (chronic) | | | | |
|----------------------------|----------|----------------|--------|---------------|
| Endpoint | Value | Species | Source | Exposure time |
| EC50 | 164 mg/l | microorganisms | ECHA | 3 h |

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

| | |
|---------------------------|---------------|
| n-octanol/water (log KOW) | -1.73 (Calc.) |
|---------------------------|---------------|

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate $\geq 99\%$, p.a., ACS

article number: **P752**

Waste treatment of containers/packagings

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

Relevant provisions relating to waste(Basel Convention)

Properties of waste which render it hazardous

H5.1 Oxidizing
H11 Toxic (Delayed or chronic)

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number

| | |
|----------------|---------|
| UN RTDG | UN 1490 |
| IMDG-Code | UN 1490 |
| ICAO-TI | UN 1490 |

14.2 UN proper shipping name

| | |
|----------------|------------------------|
| UN RTDG | POTASSIUM PERMANGANATE |
| IMDG-Code | POTASSIUM PERMANGANATE |
| ICAO-TI | Potassium permanganate |

14.3 Transport hazard class(es)

| | |
|----------------|-----|
| UN RTDG | 5.1 |
| IMDG-Code | 5.1 |
| ICAO-TI | 5.1 |

14.4 Packing group

| | |
|----------------|----|
| UN RTDG | II |
| IMDG-Code | II |
| ICAO-TI | II |

14.5 Environmental hazards

hazardous to the aquatic environment

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate $\geq 99\%$, p.a., ACS

article number: **P752**

Transport information National regulations Additional information (UN RTDG)

| | |
|------------------------------|---|
| UN number | 1490 |
| Class | 5.1 |
| Environmental hazards | Yes Hazardous to the aquatic environment |
| Packing group | II |
| Danger label(s) | 5.1 Fish and tree |



| | |
|---------------------------------|-----------------|
| Special provisions (SP) | - UN RTDG |
| Excepted quantities (EQ) | E2 UN RTDG |
| Limited quantities (LQ) | 1 kg UN RTDG |
| Emergency Action Code | 1Y |

International Maritime Dangerous Goods Code (IMDG) - Additional information

| | |
|--|---|
| Proper shipping name | POTASSIUM PERMANGANATE |
| Particulars in the shipper's declaration | UN1490, POTASSIUM PERMANGANATE, 5.1, II, MARINE POLLUTANT |
| Marine pollutant | yes (hazardous to the aquatic environment) |
| Danger label(s) | 5.1, "Fish and tree" |



| | |
|--------------------------|--------------------|
| Excepted quantities (EQ) | E2 |
| Limited quantities (LQ) | 1 kg |
| EmS | F-H, S-Q |
| Stowage category | D |
| Segregation group | 14 - Permanganates |

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

| | |
|--|--|
| Proper shipping name | Potassium permanganate |
| Particulars in the shipper's declaration | UN1490, Potassium permanganate, 5.1, II |
| Environmental hazards | yes (hazardous to the aquatic environment) |
| Danger label(s) | 5.1 |



| | |
|--------------------------|--------|
| Excepted quantities (EQ) | E2 |
| Limited quantities (LQ) | 2,5 kg |

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate $\geq 99\%$, p.a., ACS

article number: P752

SECTION 15: Regulatory information

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

There is no additional information.

National regulations(Australia)

Australian Inventory of Chemical Substances(AICS)

Substance is listed.

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances

| Name of substance | CAS No | Listed in | HS code |
|------------------------|-----------|-----------|---------|
| Potassium permanganate | 7722-64-7 | Table I | 2841.61 |

National inventories

| Country | Inventory | Status |
|---------|------------|------------------------------|
| AU | AIIC | substance is listed |
| CA | DSL | substance is listed |
| CN | IECSC | substance is listed |
| EU | ECSI | substance is listed |
| EU | REACH Reg. | substance is listed |
| JP | CSCL-ENCS | substance is listed |
| KR | KECI | substance is listed |
| MX | INSQ | substance is listed |
| NZ | NZIoC | substance is listed |
| PH | PICCS | substance is listed |
| TR | CICR | substance is listed |
| TW | TCSI | substance is listed |
| US | TSCA | substance is listed (ACTIVE) |
| VN | NCI | substance is listed |

Legend

| | |
|------------|---|
| AIIC | Australian Inventory of Industrial Chemicals |
| CICR | Chemical Inventory and Control Regulation |
| CSCL-ENCS | List of Existing and New Chemical Substances (CSCL-ENCS) |
| DSL | Domestic Substances List (DSL) |
| ECSI | EC Substance Inventory (EINECS, ELINCS, NLP) |
| IECSC | Inventory of Existing Chemical Substances Produced or Imported in China |
| INSQ | National Inventory of Chemical Substances |
| KECI | Korea Existing Chemicals Inventory |
| NCI | National Chemical Inventory |
| NZIoC | New Zealand Inventory of Chemicals |
| PICCS | Philippine Inventory of Chemicals and Chemical Substances (PICCS) |
| REACH Reg. | REACH registered substances |
| TCSI | Taiwan Chemical Substance Inventory |
| TSCA | Toxic Substance Control Act |

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate $\geq 99\%$, p.a., ACS

article number: **P752**

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|---|--|-----------------|
| 1.1 | Index No: 025-002-00-9 | | yes |
| 1.1 | EC number: 231-760-3 | CAS number: 7722-64-7 | yes |
| 2.1 | | Classification acc. to GHS: change in the listing (table) | yes |
| 2.1 | | The most important adverse physicochemical, human health and environmental effects: Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis. Delayed or immediate effects can be expected after short or long-term exposure. | yes |
| 2.2 | | Pictograms: change in the listing (table) | yes |
| 2.2 | | Hazard statements: change in the listing (table) | yes |
| 2.2 | | Precautionary statements - prevention: change in the listing (table) | yes |
| 2.2 | | Precautionary statements - response: change in the listing (table) | yes |
| 2.2 | Precautionary statements - disposal | | yes |
| 2.2 | | Precautionary statements - disposal: change in the listing (table) | yes |
| 2.2 | Labelling of packages where the contents do not exceed 125 ml: Signal word: Danger | | yes |
| 2.2 | | Labelling of packages where the contents do not exceed 125 ml: change in the listing (table) | yes |
| 2.2 | | Labelling of packages where the contents do not exceed 125 ml: change in the listing (table) | yes |
| 2.2 | | Labelling of packages where the contents do not exceed 125 ml: change in the listing (table) | yes |
| 2.3 | Other hazards: There is no additional information. | Other hazards | yes |
| 2.3 | | Results of PBT and vPvB assessment: According to the results of its assessment, this substance is not a PBT or a vPvB. | yes |
| 2.3 | | Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$. | yes |

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate $\geq 99\%$, p.a., ACS

article number: **P752**

| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|--|--|-----------------|
| 3.1 | Index No: 025-002-00-9 | | yes |
| 11.1 | | Acute toxicity: change in the listing (table) | yes |
| 12.1 | | Aquatic toxicity (chronic): change in the listing (table) | yes |
| 14.1 | UN number: 1490 | UN number | yes |
| 14.1 | | UN RTDG: UN 1490 | yes |
| 14.1 | | IMDG-Code: UN 1490 | yes |
| 14.1 | | ICAO-TI: UN 1490 | yes |
| 14.2 | UN proper shipping name: POTASSIUM PERMANGANATE | UN proper shipping name | yes |
| 14.2 | Hazardous ingredients: Potassium permanganate | | yes |
| 14.2 | | UN RTDG: POTASSIUM PERMANGANATE | yes |
| 14.2 | | IMDG-Code: POTASSIUM PERMANGANATE | yes |
| 14.2 | | ICAO-TI: Potassium permanganate | yes |
| 14.3 | Transport hazard class(es): class 5.1 hazard - oxidizing substances | Transport hazard class(es) | yes |
| 14.3 | Class: 5.1 (oxidizing substances) | | yes |
| 14.3 | | UN RTDG: 5.1 | yes |
| 14.3 | | IMDG-Code: 5.1 | yes |
| 14.3 | | ICAO-TI: 5.1 | yes |
| 14.4 | Packing group: II (substance presenting medium danger) | Packing group | yes |
| 14.4 | | UN RTDG: II | yes |
| 14.4 | | IMDG-Code: II | yes |
| 14.4 | | ICAO-TI: II | yes |
| 14.6 | Special precautions for user: Provisions for dangerous goods (ADR) should be complied within the premises. | Special precautions for user: There is no additional information. | yes |
| 14.8 | • Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) | | yes |

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate ≥99 %, p.a., ACS

article number: **P752**

| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|--|---|-----------------|
| 14.8 | UN number: 1490 | | yes |
| 14.8 | Proper shipping name: POTASSIUM PERMANGANATE | | yes |
| 14.8 | Particulars in the transport document: UN1490, POTASSIUM PERMANGANATE, 5.1, II, (E), environmentally hazardous | | yes |
| 14.8 | Class: 5.1 | | yes |
| 14.8 | Classification code: O2 | | yes |
| 14.8 | Packing group: II | | yes |
| 14.8 | Danger label(s): 5.1 + "fish and tree" | | yes |
| 14.8 | | Danger label(s): change in the listing (table) | yes |
| 14.8 | Environmental hazards: yes (hazardous to the aquatic environment) | | yes |
| 14.8 | Excepted quantities (EQ): E2 | | yes |
| 14.8 | Limited quantities (LQ): 1 kg | | yes |
| 14.8 | Transport category (TC): 2 | | yes |
| 14.8 | Tunnel restriction code (TRC): E | | yes |
| 14.8 | Hazard identification No: 50 | | yes |
| 14.8 | Emergency Action Code: 1Y | | yes |
| 14.8 | UN number: 1490 | | yes |
| 14.8 | Class: 5.1 | | yes |
| 14.8 | Packing group: II | | yes |
| 14.8 | Acute toxicity: oralLD50>2,000 mg/kg rat ECHA dermalLD50>2,000 mg/kg rat ECHA | Transport information National regulations Additional information (UN RTDG) | yes |
| 14.8 | Aquatic toxicity (chronic): EC50 164 mg/l microorganisms ECHA 3 h growth (EbCx) 20% 86.4 mg/l microorganisms ECHA 3 h | UN number: 1490 | yes |
| 14.8 | | Class: 5.1 | yes |

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate ≥ 99 %, p.a., ACS

article number: **P752**

| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|--|--|-----------------|
| 14.8 | | Environmental hazards: Yes Hazardous to the aquatic environment | yes |
| 14.8 | | Packing group: II | yes |
| 14.8 | | Danger label(s): 5.1 Fish and tree | yes |
| 14.8 | | Danger label(s): change in the listing (table) | yes |
| 14.8 | | Special provisions (SP): - UN RTDG | yes |
| 14.8 | | Excepted quantities (EQ): E2 UN RTDG | yes |
| 14.8 | | Limited quantities (LQ): 1 kg UN RTDG | yes |
| 14.8 | | Emergency Action Code: 1Y | yes |
| 14.8 | Marine pollutant: yes (P) (hazardous to the aquatic environment) | Marine pollutant: yes (hazardous to the aquatic environment) | yes |
| 14.8 | UN number: 1490 | | yes |
| 14.8 | Class: 5.1 | | yes |
| 14.8 | Packing group: II | | yes |
| 14.8 | | Danger label(s): change in the listing (table) | yes |
| 14.8 | | Danger label(s): change in the listing (table) | yes |
| 15.1 | Safety, health and environmental regulations/ legislation specific for the substance or mixture | Safety, health and environmental regulations/ legislation specific for the substance or mixture: There is no additional information. | yes |
| 15.1 | National inventories: Substance is listed in the following national inventories: | | yes |
| 15.1 | | National inventories: change in the listing (table) | yes |
| 15.1 | | National regulations(Australia) | yes |
| 15.1 | | Australian Inventory of Chemical Substances(AICS): Substance is listed. | yes |
| 15.1 | | Other information: Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. | yes |

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate ≥ 99 %, p.a., ACS

article number: **P752**

| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|---------------------------|--|-----------------|
| 15.1 | | UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances | yes |
| 15.1 | | UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances: change in the listing (table) | yes |
| 15.1 | | National inventories | yes |
| 15.1 | | National inventories: change in the listing (table) | yes |

Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|-----------|--|
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| Ceiling-C | Ceiling value |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| DNEL | Derived No-Effect Level |
| EC50 | Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval |
| ED | Endocrine disruptor |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| EmS | Emergency Schedule |
| ErC50 | \equiv EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations |
| HS | Harmonized Commodity Description and Coding System (Harmonized System, drawn up by the World Customs Organisation) |
| IATA | International Air Transport Association |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA) |
| ICAO | International Civil Aviation Organization |
| ICAO-TI | Technical instructions for the safe transport of dangerous goods by air |
| IMDG | International Maritime Dangerous Goods Code |
| IMDG-Code | International Maritime Dangerous Goods Code |
| LC50 | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval |
| LD50 | Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval |
| NLP | No-Longer Polymer |
| PBT | Persistent, Bioaccumulative and Toxic |
| PNEC | Predicted No-Effect Concentration |

Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



Potassium permanganate $\geq 99\%$, p.a., ACS

article number: **P752**

| Abbr. | Descriptions of used abbreviations |
|---------|---|
| STEL | Short-term exposure limit |
| TWA | Time-weighted average |
| UN RTDG | UN Recommendations on the Transport of Dangerous Good |
| vPvB | Very Persistent and very Bioaccumulative |
| WES | Safe Work Australia: Workplace exposure standards for airborne contaminants |

Key literature references and sources for data

Safe Work Australia's Code of Practice for Labelling of Workplace Hazardous Chemicals (under WHS Regulations).

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

| Code | Text |
|-------|---|
| H272 | May intensify fire; oxidiser. |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H361d | Suspected of damaging the unborn child. |
| H373 | May cause damage to organs (brain) through prolonged or repeated exposure (if inhaled). |

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.