

Permanganate Value

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

1.1 - Product identifier

Trade name/designation Permanganate Value
Chemical name
Product-type Mixture
Product code TbsRPERM
CAS No.

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

Relevant identified uses - Reagent for water analysis
Uses advised against - Other

1.3 - Details of the supplier of the safety data sheet

Water-I.D. GmbH
Daimlerstr. 20
76344 Eggenstein Germany
+49 (0) 721 - 78 20 29 - 0 Fax+49 (0) 721 - 78 20 29 - 11
EHS / Compliance: lab@water-id.com

1.4 - Emergency telephone number

- 毒物管理センター ミュンヘン
Tel: +49 (0) 89 / 19 24 0
ドイツ
24時間サービス
言語 ドイツ語, 英語
からもお電話ください。Japan

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

| | |
|-------------------|--|
| Aquatic Chronic 3 | Hazardous to the aquatic environment - Aquatic Chronic 3 |
| Aquatic Acute 2 | Hazardous to the aquatic environment - Aquatic Acute 2 |

2.2 - Label elements

Signal word
Hazard pictograms
Hazard statements

| | |
|------|---|
| H401 | Toxic to aquatic life. |
| H412 | Harmful to aquatic life with long lasting effects |

Precautionary statements

| | |
|------|--|
| P273 | Avoid release to the environment. |
| P501 | Dispose of contents, container to an appropriate recycling or disposal facility. |

2.3 - Other hazards

PBT-substance. - No information available.

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vPvB-substance. - No information available.

SECTION 3: Composition / information on ingredients

- Not applicable

3.1 - Substances

Not applicable

3.2 - Mixtures

| Chemical name | No | % | Class | Spec. concentrations |
|-------------------------|---|---------|-------|----------------------|
| potassium chloride | CAS No. : 7447-40-7 Index No. : EC No. : 231-211-8 | 70 - 95 | | Not applicable |
| Magnesium silicate | CAS No. : 14807-96-6 Index No. : EC No. : 238-877-9 | 1 - 10 | | Not applicable |
| Sodium Starch Glycolate | CAS No. : 9063-38-1 Index No. : EC No. : | 1 - 10 | | Not applicable |
| potassium permanganate | CAS No. : 7722-64-7 Index No. : 025-002-00-9 EC No. : 231-760-3 | < 1 | | Not applicable |

SECTION 4: First aid measures

4.1 - Description of first aid measures

Following inhalation - No special measures are necessary.
- Provide fresh air.

Following skin contact - Wash immediately with: Water
- When in doubt or if symptoms are observed, get medical advice.

After eye contact - Rinse immediately carefully and thoroughly with eye-bath or water.
- In case of eye irritation consult an ophthalmologist.

After ingestion - Rinse mouth thoroughly with water.
- Do NOT induce vomiting.

4.2 - Most important symptoms and effects, both acute and delayed

Symptoms and effects - Following inhalation - No information available.

Symptoms and effects - Following skin contact - No information available.

Symptoms and effects - After eye contact - No information available.

Symptoms and effects - After ingestion - No information available.

4.3 - Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1 - Extinguishing media

Suitable extinguishing media - ABC-powder

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- Carbon dioxide (CO₂)
- Foam
- Extinguishing powder

Unsuitable extinguishing media - Full water jet

5.2 - Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture - No information available.

5.3 - Advice for firefighters

- Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

- Use personal protection equipment.
- Provide adequate ventilation.
- Avoid dust formation.

For emergency responders - No information available.

6.2 - Environmental precautions

- No information available.

6.3 - Methods and material for containment and cleaning up

Methods and material for containment - No information available.

Methods and material for cleaning up

- Take up mechanically.
- Wash with plenty of water.

Inappropriate techniques - No information available.

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

Recommendation - No special technical protective measures are necessary.

Advices on general occupational hygiene - No information available.

7.2 - Conditions for safe storage, including any incompatibilities

- No information available.

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

8.2 - Exposure controls

Appropriate engineering controls - No information available.

8.3. - Individual protection measures, such as personal protective equipment

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- Suitable protective clothing: lab coat



SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

| <u>Physical state</u> | Solid | <u>Appearance</u> | Tablets |
|-------------------------------|-------|-------------------|-----------|
| <u>Colour</u> | brown | <u>Odour</u> | odourless |
| Odour threshold | | No data available | |
| pH | | 7,1 10,5 g/l | |
| Melting point | | No data available | |
| Freezing point | | No data available | |
| Boiling point | | No data available | |
| Flash point | | No data available | |
| Evaporation rate | | No data available | |
| flammability | | No data available | |
| Lower explosion limit | | No data available | |
| Upper explosion limit | | No data available | |
| Vapour pressure | | No data available | |
| Vapour density | | No data available | |
| Relative density | | No data available | |
| Density | | No data available | |
| Solubility (Water) | | No data available | |
| Solubility (Ethanol) | | No data available | |
| Solubility (Acetone) | | No data available | |
| Solubility (Organic solvents) | | No data available | |
| Log KOC | | No data available | |
| Auto-ignition temperature | | No data available | |
| Decomposition temperature | | No data available | |
| Kinematic viscosity | | No data available | |
| Dynamic viscosity | | No data available | |

9.2 - Other information

| | |
|-------------------------|-------------------|
| VOC content | No data available |
| Minimum ignition energy | No data available |
| Conductivity | No data available |

SECTION 10: Stability and reactivity

10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

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10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

10.4 - Conditions to avoid

- No information available.

10.5 - Incompatible materials

- No information available.

10.6 - Hazardous decomposition products

- Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 - Information on toxicological effects

Acute toxicity - Not classified

Toxicity : Mixture

| | |
|---------------------------------------|-------------------|
| LD50 oral (rat) | No data available |
| LD50 dermal (rat) | No data available |
| LD50 dermal (rabbit) | No data available |
| LC50 inhalation (rat) | No data available |
| LC50 inhalation dusts and mists (rat) | No data available |
| LC50 inhalation vapours (rat) | No data available |

- Based on available data, the classification criteria are not met.

Toxicity : Substances

potassium permanganate (7722-64-7)

| | |
|-----------------|--------|
| LD50 oral (rat) | TOXNET |
|-----------------|--------|

Skin corrosion/irritation - Not classified

Serious eye damage/eye irritation - Not classified

Respiratory or skin sensitisation - Not classified

Germ cell mutagenicity - Not classified

Carcinogenicity - Not classified

Reproductive toxicity - Not classified

STOT-single exposure - Not classified

STOT-repeated exposure - Not classified

Aspiration hazard - Not classified

SECTION 12: Ecological information

12.1 - Toxicity

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Toxicity : Mixture

| | |
|-----------------------------------|-------------------|
| EC50 48 hr crustacea | No data available |
| LC50 96 hr fish | No data available |
| ErC50 algae | No data available |
| ErC50 other aquatic plants | No data available |
| NOEC chronic fish | No data available |
| NOEC chronic crustacea | No data available |
| NOEC chronic algae | No data available |
| NOEC chronic other aquatic plants | No data available |

Toxicity : Substances

| potassium permanganate (7722-64-7) | |
|------------------------------------|---|
| EC50 48 hr crustacea | 0,06 mg/l Daphnia magna (ECOTOX Database) M-Factor: 10 |
| LC50 96 hr fish | 0,1 mg/l Ictalurus punctatus ECOTOX Database |
| NOEC chronic fish | 0,35 mg/l 24h (ECHA) |
| NOEC chronic crustacea | 0,02 mg/l 24h (ECHA) |

- Harmful to aquatic life with long lasting effects.

12.2 - Persistence and degradability

| | |
|---------------------------------|-------------------|
| Biochemical oxygen demand (BOD) | No data available |
| Chemical oxygen demand (COD) | No data available |
| % of biodegradation in 28 days | No data available |

- No information available.

12.3 - Bioaccumulative potential

| | |
|-------------------------------|-------------------|
| Bioconcentration factor (BCF) | No data available |
| Log KOC | No data available |

- No indication of bioaccumulation potential.

12.4 - Mobility in soil

- No information available.

12.6 - Other adverse effects

- No information available.

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

Waste treatment methods - Dispose of waste according to applicable legislation.

Sewage disposal - No information available.

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Special precautions for waste treatment - No information available.

Community or national or regional provisions - No information available.

SECTION 14: Transport information

14.1 - UN number

UN number (ADR) : Not applicable

UN number (RID) : Not applicable

UN number (IMDG) : Not applicable

UN number (IATA) : Not applicable

14.2 - UN proper shipping name

14.3 - Transport hazard class(es)

ADR Classification code: :

14.4 - Packing group

14.5 - Environmental hazards

Environmental hazards :

Marine pollutant :

14.6 - Special precautions for user

14.7 - Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

VOC content No data available

- Substance/product listed in the following inventories:

Community safety, health and environmental provisions, national laws Existing Chemicals Substances (CSCL) (CAS No. : 7447-40-7, CAS No. : 9063-38-1, CAS No. : 7722-64-7).
Chemical Substances exempted from notification of manufacturing/import amount (CSCL) (CAS No. : 7447-40-7).
Biodegradation and Bioconcentration Results (METI) (CAS No. : 7447-40-7).
Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (CAS No. : 7447-40-7).
Chemical Substances Requiring Labeling and Delivery of Documents (ISHA) (CAS No. : 7447-40-7).
Specified Chemical Substances (ISHA) (CAS No. : 7447-40-7).
Administrative Control Levels of Working Environment Evaluation Standards (ISHA) (CAS No. : 7447-40-7).
Japan Air Pollution Control Law (CAS No. : 7447-40-7).
Japan Water Pollution Control Law (CAS No. : 7447-40-7).

15.2 - Chemical Safety Assessment

Chemical safety assessment carried out for the product - No information available.

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SECTION 16: Other information

SDS versions

| Version | Issue date | Description of the amendments |
|---------|------------|-------------------------------|
| 1 | 21.04.2020 | Creation |

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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