

Safety Data Sheet POTASSIUM OXALATE Monohydrate

SDS no. LQMTCR9S • Version 1.0 • Date of issue: 2023-09-03

SECTION 1: Identification

GHS Product identifier

Product name POTASSIUM OXALATE Monohydrate

Recommended use of the chemical and restrictions on use

Reagent in analytical chemistry, source of oxalic acid, bleaching and cleaning, removing stains from textiles, photography and laboratory reagent.

Supplier's details

Name ChemSupply Australia Pty Ltd
Address 38-50 Bedford Street
5013 Gillman South Australia
Australia

Telephone 08 8440 2000
email www.chemsupply.com.au

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Not classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Acute toxicity, dermal, Cat. 4
- Acute toxicity, oral, Cat. 4

GHS label elements, including precautionary statements

Pictograms



Signal word

Warning

Hazard statement(s)

H302
H312

Harmful if swallowed
Harmful in contact with skin

Precautionary statement(s)

P280
P301+P312
P302+P352
P312
P362+P364
P501

Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: Call a POISON CENTER/doctor/phycsian if you feel unwell,
IF ON SKIN: Wash with plenty of water/soap
Call a POISON CENTER/doctor/phycsian if you feel unwell.
Take off contaminated clothing and wash it before reuse.
Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight: 184.24

Components

Component	CAS no.	Concentration
Potassium oxalate monohydrate	6487-48-5	100 - 100 % (weight)
CLASSIFICATIONS: Acute toxicity, dermal, Cat. 4; Acute toxicity, oral, Cat. 4. HAZARDS: H302 - Harmful if swallowed; H312 - Harmful in contact with skin.		

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

First Aid Facilities: Maintain eyewash fountain in work area.

If inhaled

If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Immediately obtain medical aid if cough or other symptoms appear.

In case of skin contact

Remove contaminated clothing and wash before re-use. Wash affected areas with copious quantities of water immediately. Seek medical advice.

In case of eye contact

Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.

If swallowed

Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. Give water to drink. DO NOT INDUCE VOMITING. Seek medical advice.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor

SECTION 5: Fire-fighting measures**Suitable extinguishing media**

Use extinguishing media most appropriate for the surrounding fire. No limitations to the type of extinguishing media.

Specific hazards arising from the chemical

Emits toxic fumes under fire conditions.

Special protective actions for fire-fighters

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

SECTION 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. For personal protection see section 8.

Methods and materials for containment and cleaning up

Sweep up (avoid generating dust) and using clean non-sparking tools transfer to a clean, suitable, clearly labelled container for disposal in accordance with local regulations.

SECTION 7: Handling and storage**Precautions for safe handling**

Avoid inhalation of dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Minimize dust generation and accumulation. Work in fumehood and use only with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Wear suitable protective clothing. Contaminated clothing should be removed and washed before re-use. Wash hands and face thoroughly after working with material.

Conditions for safe storage, including any incompatibilities

Ensure containers are clearly labelled. Keep containers closed at all times. Store away from oxidizing agents. Store in a cool, dry place.

SECTION 8: Exposure controls/personal protection**Appropriate engineering controls**

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn.

Individual protection measures, such as personal protective equipment (PPE)**Eye/face protection**

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

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Skin protection

Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection

Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

Clean clothing or protective clothing should be worn, preferably with and apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Respiratory protection

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Solid
Appearance	White.
Color	No data available.
Odor	Odourless.
Odor threshold	No data available.
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	7.0 - 8.5 (50g/L, H ₂ O, 20 °C)
Kinematic viscosity	No data available.
Solubility	Solubility in Water: 360 g/L at 20 °C
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Evaporation rate	No data available.
Density and/or relative density	Specific Gravity: 2.13 (approx.)
Relative vapor density	No data available.
Particle characteristics	No data available.

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)

No data available.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.

Chemical stability

Stable.

Possibility of hazardous reactions

None under normal use conditions.

Hazardous Polymerization: Will not occur.

Conditions to avoid

Moisture and heating.

Incompatible materials

Strong acids, strong oxidizers, heavy metals, ammonia, halogens and cyanides.

Hazardous decomposition products

Oxides of carbon and metals.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Harmful if swallowed. Soluble oxalates cause corrosive action on the mucosa and severe gastroenteritis (infection or irritation of the digestive tract, particularly the stomach and intestine) can occur with pain and vomiting. Symptoms include of nausea, vomiting, ulceration of the mouth, headache, diarrhea, stiffness and excess salivation. May affect CNS (weakness, muscle tremors, depression), cardiovascular system (rapid weak pulse, hypotension, dysrhythmia), respiration system, kidneys/urinary system (kidney damage) and low blood calcium levels.

Harmful by inhalation. Corrosive to mucous membranes. Causes irritation to upper respiratory tract. Exposure may cause coughing, spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, pulmonary edema, chest pains, burning sensation, wheezing, and difficulty breathing. May cause nervousness, cramps, central nervous system depression.

Skin corrosion/irritation

Harmful in contact with the skin. May cause redness, pain and severe burns. Oxalate ions are an irritant to the skin and may cause inflammation, skin lesions/ulcerations and burns. Prolonged or repeated exposure can lead to dermatitis.

Serious eye damage/irritation

Causes eye irritation. Symptoms include of blurred vision, redness, pain and severe tissue burns. Prolonged contact may cause eye damage.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

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Reproductive toxicity

No data available.

Summary of evaluation of the CMR properties

No data available.

Specific target organ toxicity (STOT) - single exposure

No data available.

Specific target organ toxicity (STOT) - repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

Chronic Effects: Circulatory failure or nervous system irregularities may follow prolonged calcium metabolism disturbances due to oxalation.

Potassium oxalate monohydrate: Epidemiology: A study of railroad car cleaners in Norway who were heavily exposed to oxalic acid solutions and vapors revealed a 53% prevalence of urolithiasis (the formation of urinary stones), compared to a rate of 12% among unexposed workers from the same company.

Teratogenicity: No information found

Reproductive Effects: Oxalic acid caused kidney damage in fetal sheep and rats and disturbed the estrus cycle in rats. Increased sperm abnormalities were seen in the second generation of mice administered 0.2% oxalic acid in the drinking water.

SECTION 12: Ecological information

Toxicity

No data available.

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

No data available.

Endocrine disrupting properties

No data available.

Other adverse effects

No data available.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: S6

SECTION 16: Other information

Further information/disclaimer

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia
National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'
Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.
Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.
Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019
Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au
IATA, Dangerous Goods Regulations (DGR)

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IMO, International Maritime Dangerous Goods Code (IMDG)