

## Safety Data Sheet POTASSIUM SULFATE

SDS no. QKNS4CN1 • Version 1.0 • Date of issue: 2024-06-24

### SECTION 1: Identification

#### GHS Product identifier

Product name POTASSIUM SULFATE

#### Other means of identification

Sulfuric acid, dipotassium salt,

Sulfuric acid potassium salt,

Sal polychrestum

POTASSIUM SULFATE LR PL026

POTASSIUM SULFATE AR PA026

POTASSIUM SULFATE Ph Eur, FCC PP026

POTASSIUM SULFATE conforms to MIL-P-193A PS026

PL026 PA026 PP026 PS026

#### Recommended use of the chemical and restrictions on use

Analytical reagent, medicine (cathartic), gypsum cements, fertilizer for chloride-sensitive crops such as tobacco and citrus, alum manufacture, glass manufacture and food additive; 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](http://www.chemsupply.com.au)

#### Emergency phone number

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

### SECTION 2: Hazard identification

#### General hazard statement

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

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

**Classification of the substance or mixture**

**GHS classification in accordance with: UN GHS revision 7**

Not a hazardous substance or mixture.

**GHS label elements, including precautionary statements**

Not a hazardous substance or mixture.

**Other hazards which do not result in classification**

Not a hazardous substance or mixture.

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**SECTION 3: Composition/information on ingredients**

**Mixtures**

Molecular weight: 174.27

**Components**

Component	CAS no.	Concentration
Potassium sulfate (EC no.: 231-915-5) (weight)	7778-80-5	95 - <= 100 %
CLASSIFICATIONS: No data available. HAZARDS: No data available.		

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**SECTION 4: First-aid measures**

**Description of necessary first-aid measures**

General advice	First Aid Facilities: Maintain eyewash fountain in work area.
If inhaled	Remove victim to fresh air. If breathing has stopped, apply artificial respiration. Seek medical advice if effects persist
In case of skin contact	Wash with plenty of soap and water. Seek medical advice if effects persist.
In case of eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Seek medical advice if effects persist.
If swallowed	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist.

**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, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

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**SECTION 5: Fire-fighting measures**

**Suitable extinguishing media**

Use fire extinguishing media appropriate for surrounding environment. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Specific hazards arising from the chemical**

May liberate toxic fumes in fire (sulfur oxides).

Material does not burn. Fire or heat may produce irritating, poisonous and/or corrosive gases. Containers may explode when heated. Runoff may pollute waterways.

**Special protective actions for fire-fighters**

Wear SCBA and structural firefighter's uniform.

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**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 or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Keep in suitable, closed containers for disposal.

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**SECTION 7: Handling and storage**

**Precautions for safe handling**

Use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Wash hands and face thoroughly after working with material.

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

Store away from oxidizing agents. Keep container tightly closed and in a cool, well-ventilated place

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**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.

**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.

**Skin protection**

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hand Protection: Ensure hand protection complies with AS 2161, Occupational protective gloves - Selection, use and maintenance.

**Body protection**

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

**Respiratory protection**

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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.

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## SECTION 9: Physical and chemical properties

### Basic physical and chemical properties

Physical state	Solid
Appearance	Colourless or white hard crystals or powder.
Color	No data available.
Odor	Odourless.
Odor threshold	No data available.
Melting point/freezing point	1067 - 1069 °C
Boiling point or initial boiling point and boiling range	1689 °C
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	5.5 - 7.5 (50 g/l, H <sub>2</sub> O, 20 °C)
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Soluble (110 g/L @20 °C). Solubility in Organic Solvents: Slightly soluble in glycerol. Insoluble in alcohol.
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: 2.66
Relative vapor density	No data available.
Particle characteristics	No data available.

### Supplemental information regarding physical hazard classes

No data available.

### Further safety characteristics (supplemental)

Other Information: Taste: Bitter saline taste.

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## SECTION 10: Stability and reactivity

### Reactivity

Stable under normal conditions of storage and handling.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

Hazardous Polymerization: Will not occur.

**Conditions to avoid**

Exposure to moisture.

Avoid storing in direct sunlight and avoid extremes of temperature.

**Incompatible materials**

Strong oxidizing agents, aluminium and magnesium, light metals.

**Hazardous decomposition products**

Oxides of sulfur and potassium.

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**SECTION 11: Toxicological information**

**Information on toxicological effects**

**Acute toxicity**

Acute Toxicity - Oral: LD50 (rat): 6600 mg/kg

Ingestion: May be harmful if swallowed. May cause gastrointestinal tract irritation. Symptoms may include nausea, vomiting, diarrhoea and abdominal cramps which may lead to weakness, mental confusion, hypotension, paralysis and possible circulatory disturbances including cardiac arrhythmias, heart block and cardiac arrest. Large oral dosages may produce gastrointestinal disturbances and irritation.

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. May cause sneezing, coughing, or nuisance dust effect.

**Skin corrosion/irritation**

May be harmful if absorbed through skin. May cause skin irritation.

**Serious eye damage/irritation**

Not expected to cause adverse effects however dust may cause mechanical irritation to the eye.

**Respiratory or skin sensitization**

No data available.

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**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**

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No data available.

### Additional information

Chronic Effects: Swallowing large doses causes severe gastric disturbances and irritation. Not expected to be a health hazard, Potassium poisoning may occur in rare cases of long exposure or ingestion.

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Potassium sulfate: guinea pig LDLo subcutaneous 3gm/kg (3000mg/kg) "Abderalden's Handbuch der Biologischen Arbeitsmethoden." Vol. 4, Pg. 1360, 1935.

rat LD50 oral 6600mg/kg (6600mg/kg) Gigiena i Sanitariya. For English translation, see HYSAAV. Vol. 50(7), Pg. 24, 1985.

women LDLo oral 750mg/kg (750mg/kg) BEHAVIORAL: CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD

LUNGS, THORAX, OR RESPIRATION: OTHER CHANGES

GASTROINTESTINAL: "HYPERMOTILITY, DIARRHEA" Archiv fuer Experimentelle Pathologie und Pharmakologie. Vol. 21, Pg. 169, 1886.

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## SECTION 12: Ecological information

### Toxicity

Acute Toxicity - Fish: LC50 (Pimephales promelas): 680 mg/l/96h

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## 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.

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## SECTION 14: Transport information

### ADG (Road and Rail)

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

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## SECTION 15: Regulatory information

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

### Australia SUSMP

Poison Schedule: NS

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## SECTION 16: Other information

**Further information/disclaimer**

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

**Preparation information**

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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](http://hcis.safeworkaustralia.gov.au)

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)