

## Safety Data Sheet **CHROMIUM (III) POTASSIUM SULFATE Dodecahydrate**

SDS no. DZTVMH3P • Version 1.0 • Date of issue: 2024-01-10

### SECTION 1: Identification

#### GHS Product identifier

Product name CHROMIUM (III) POTASSIUM SULFATE Dodecahydrate

#### Other means of identification

CHROMIUM POTASSIUM SULFATE Dodecahydrate LR CL039

Chrome Alum,  
Chrome Potash Alum,  
Potassium Chromium Sulfate,  
Alum Chrome,  
Potassium chromium (III) sulfate

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

Tanning (chrome-tan liquors), textile dye (mordant), photography (fixing bath), ceramics, rendering glue and gum insoluble, waterproofing fabrics, manufacture of ink and other chromium salts; 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

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

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- Serious eye damage/eye irritation, Cat. 2A
- Skin corrosion/irritation, Cat. 2

### GHS label elements, including precautionary statements

#### Pictograms



#### Signal word

#### Warning

#### Hazard statement(s)

H315

Causes skin irritation

H319

Causes serious eye irritation

#### Precautionary statement(s)

P264

Wash hands thoroughly after handling.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352

IF ON SKIN: Wash with plenty of water/soap

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313

If skin irritation occurs: Get medical advice/attention.

P337+P313

If eye irritation persists: Get medical advice/attention.

P362+P364

Take off contaminated clothing and wash it before reuse.

## SECTION 3: Composition/information on ingredients

#### Mixtures

Molecular weight: 499.41

#### Components

Component	CAS no.	Concentration
Chromium (III) Potassium Sulfate Dodecahydrate	7788-99-0	<= 100 % (weight)
CLASSIFICATIONS: Serious eye damage/eye irritation, Cat. 2A; Skin corrosion/irritation, Cat. 2. HAZARDS: H315 - Causes skin irritation; H319 - Causes serious eye irritation.		

## SECTION 4: First-aid measures

#### Description of necessary first-aid measures

General advice

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

Immediately remove contaminated clothing and wash affected area with water for at least 15 minutes. Ensure contaminated clothing is washed before re-use. Seek medical advice /attention depending on the severity.

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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. 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

Treat symptomatically based on judgement of doctor and individual reactions of the patient.

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 appropriate media for surrounding fire.

#### Specific hazards arising from the chemical

Sulfur oxides.

Material does not burn. Fire or heat may produce irritating, poisonous and/or corrosive gases.

#### 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.

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## SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms. Use personal protective equipment listed in Section 8.

#### Methods and materials for containment and cleaning up

Sweep up (avoid generating dust) and remove to a suitable, clearly labelled container for disposal in accordance with local regulations. Prevent from entering into drains, ditches, rivers or the sea.

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## SECTION 7: Handling and storage

#### Precautions for safe handling

Only use in well-ventilated areas. Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

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

Store in cool place and out of direct sunlight. Store in well ventilated area. Keep containers closed at all times.

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## SECTION 8: Exposure controls/personal protection

#### Appropriate engineering controls

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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

Hand protection should comply 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

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	Dark, violet-red crystals; efflorescent.
Color	No data available.
Odor	Odourless.
Odor threshold	No data available.
Melting point/freezing point	89 °C
Boiling point or initial boiling point and boiling range	Loses 10H <sub>2</sub> O @ 100 °C; loses all water @ 400 °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	~ 3 (50 g/l, H <sub>2</sub> O, 20 °C)
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Very soluble (250 g/L @ 25 °C). Solubility in Organic Solvents: Practically 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: 1.83
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: The aqueous solution is violet when cold, green when hot. The violet colour returns after a few weeks at room temperature.

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**SECTION 10: Stability and reactivity****Reactivity**

Stable under normal conditions of storage and handling.

**Chemical stability**

Aqueous solution slowly becomes green on heating and recovers reddish-violet colours on cooling.

**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 oxidising agents, aluminium and magnesium.

**Hazardous decomposition products**

Toxic fumes of sulfur oxides, potassium oxides and chromium oxides.

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**SECTION 11: Toxicological information****Information on toxicological effects****Acute toxicity**

Ingestion: Causes irritation to the gastrointestinal tract. Large oral doses may cause dizziness, intense thirst, abdominal pain, vomiting and shock. Death may occur from renal failure.

Inhalation: Harmful by inhalation. Causes irritation to the upper respiratory tract and mucous membranes. Symptoms may include coughing, shortness of breath. May cause headache, dyspnea and fever. May also cause tracheobronchial irritation and pulmonary edema.

**Skin corrosion/irritation**

Causes irritation to skin. Symptoms include redness, itching and pain.

**Serious eye damage/irritation**

Causes irritation, redness and pain.

**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**

No data available.

**Additional information**

Chronic Effects: Prolonged or repeated exposure may cause skin dermatitis and ulceration and eye damage. Prolonged or repeated inhalation of dust may cause perforation of the nasal septum.

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**SECTION 12: Ecological information**

**Mobility in soil**

No mobility data available for this product.

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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)