

## Safety Data Sheet **CALCIUM NITRATE Tetrahydrate**

SDS no. F2DJYC0Z • Version 1.0 • Date of issue: 2025-11-05

### SECTION 1: Identification

#### GHS Product identifier

Product name CALCIUM NITRATE Tetrahydrate

#### Other means of identification

Product Product Code

CALCIUM NITRATE Tetrahydrate LR CLO15

CALCIUM NITRATE Tetrahydrate AR CA015

Lime nitrate, Nitrocalcite, Lime saltpeter

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

Pyrotechnics, explosives, matches, electronic industry, fertilisers, other nitrates, source of <sup>14</sup>C by nuclear irradiation, analytical chemistry 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](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

- Acute toxicity, oral, Cat. 4
- Serious eye damage/eye irritation, Cat. 1

#### GHS label elements, including precautionary statements

#### Pictograms

## Safety Data Sheet

### CALCIUM NITRATE Tetrahydrate

SDS no. F2DJYC0Z • Version 1.0 • Date of issue: 2025-11-05



#### Signal word

**Danger**

#### Hazard statement(s)

H302

Harmful if swallowed

H318

Causes serious eye damage

#### Precautionary statement(s)

P264

Wash hands thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

P280

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

P301+P312

IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell,

P305+P351+P338

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

P310

Immediately call a POISON CENTER/doctor/physician

P330

Rinse mouth.

P501

Dispose of contents/container to an approved waste disposal facility

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

Calcium Nitrate tetrahydrate is not classified as DG under the ADG according to SP208.

## SECTION 3: Composition/information on ingredients

#### Mixtures

<b>Molecular weight</b>	236.15
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<b>Component</b>	<b>Identification</b>	<b>Weight %</b>
Calcium(II) nitrate, tetrahydrate	CAS no.: 13477-34-4	<= 100 %

## 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. Get medical aid if cough or other symptoms appear.

In case of skin contact

Rinse with plenty of water. Get medical attention if irritation develops and persists.

In case of eye contact

If contact with the eye(s) occurs, wash with copious amounts of water for approximately 15 minutes holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. 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.

#### Most important symptoms/effects, acute and delayed

## Safety Data Sheet

### CALCIUM NITRATE Tetrahydrate

SDS no. F2DJYC0Z • Version 1.0 • Date of issue: 2025-11-05

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

Small fire: Use dry chemicals, CO<sub>2</sub> or foam.

Large fire: Flood fire area with water or alcohol resistant foam from a protected position. Dam fire control water for later disposal.

#### Specific hazards arising from the chemical

Hazards from Combustion Products: May liberate toxic fumes in fire including oxides of calcium and nitrogen and nitrous gases.

Non-combustible

#### Special protective actions for fire-fighters

Wear SCBA and chemical splash suit. Structural firefighter's uniform will provide limited protection.

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## SECTION 6: Accidental release measures

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

Avoid dust formation. Avoid breathing vapours, mist or gas. For personal protection see section 8.

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

Do not contaminate. Keep combustibles (wood, paper, clothing, oil, etc.) away from spilled material.

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

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.

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## SECTION 7: Handling and storage

#### Precautions for safe handling

Avoid contact with skin and eyes. Do not eat, drink or smoke while handling. Wash hands with soap and water after handling. For precautions see section 2.

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

Store in a cool, dry, well-ventilated area, out of direct sunlight. Store in suitable, labelled containers. Keep containers tightly closed.

Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

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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.

## Safety Data Sheet

### CALCIUM NITRATE Tetrahydrate

SDS no. F2DJYC0Z • Version 1.0 • Date of issue: 2025-11-05

#### Body protection

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

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

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/ NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

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## SECTION 9: Physical and chemical properties

### Basic physical and chemical properties

Physical state	Solid
Appearance	Colourless, or white mass.
Color	Colourless, or white
Odor	Odourless
Odor threshold	
Melting point/freezing point	44-45 °C
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.
Auto-ignition temperature	No data available.
Decomposition temperature	>130 °C (release of crystalline water), 561 °C
pH	5.0 - 7.0 (50 g/l, H <sub>2</sub> O, 25 °C)
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Soluble (2710 g/L @ 40 °C) Solubility in Organic Solvents: Soluble in alcohol and acetone.
Partition coefficient n-octanol/ water (log value)	No data available.
Vapor pressure	No data available.
Density and/or relative density	Specific Gravity: 1.82
Relative vapor density	No data available.
Particle characteristics	No data available.

## Safety Data Sheet

### CALCIUM NITRATE Tetrahydrate

SDS no. F2DJYC0Z • Version 1.0 • Date of issue: 2025-11-05

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## SECTION 10: Stability and reactivity

### Reactivity

Stable under normal conditions of storage and handling.

### Chemical stability

Stable. Hygroscopic.

### Possibility of hazardous reactions

Violent reaction with reducing agents

### Conditions to avoid

Keep away from heat. Decomposition takes place from temperatures above: >44 °C

### Incompatible materials

Organ combustible material, reducing agents, strong acids, alcohols, amines, ethers, ketones, carboxylic acids and ammonium compounds.

### Hazardous decomposition products

Oxides of calcium and nitrogen and nitrous gases.

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## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

Acute Toxicity - Oral: Category 4

LD50 (rat): 300 - 2000 mg/kg. (OECD Test Guideline 423)

Ingestion: May cause irritation to the gastrointestinal tract, nausea and vomiting.

Inhalation: May be irritating to respiratory system causing nausea and vomiting.

#### Skin corrosion/irritation

May be irritating to skin.

#### Serious eye damage/irritation

Causes serious eye damage.

Serious eye damage/irritation: Category 1

#### Respiratory or skin sensitization

Not classified based on available information.

#### Germ cell mutagenicity

Not classified based on available information.

#### Carcinogenicity

Not classified based on available information.

#### Reproductive toxicity

Not classified based on available information.

#### Specific target organ toxicity (STOT) - single exposure

Not classified based on available information.

#### Specific target organ toxicity (STOT) - repeated exposure

Not classified based on available information.

## Safety Data Sheet

### CALCIUM NITRATE Tetrahydrate

SDS no. F2DJYC0Z • Version 1.0 • Date of issue: 2025-11-05

#### Aspiration hazard

Not classified based on available information.

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## SECTION 12: Ecological information

#### Toxicity

Ecotoxicity: Quantitative data on the ecological effect of this product are not available.

Information on Ecological Effects: The following applies to nitrates in general: may contribute to the eutrophication of water supplies.

[8X] Acute Toxicity - Fish: The following applies to nitrates in general: fish: LC50: >500 mg/l.

#### Persistence and degradability

Methods for the determination of biodegradability are not applicable to inorganic substances.

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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.

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## Safety Data Sheet

### **CALCIUM NITRATE Tetrahydrate**

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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)