

Safety Data Sheet CITRIC ACID Monohydrate

SDS no. AL1VG0HX • Version 1.0 • Date of issue: 2025-10-06

SECTION 1: Identification

GHS Product identifier

Product name CITRIC ACID Monohydrate

Other means of identification

Product Product Code

Citric Acid Monohydrate BP	CP014
Citric Acid Monohydrate LR	CL014
Citric Acid Monohydrate AR	CA014

Recommended use of the chemical and restrictions on use

Preparation of citrates, flavoring extracts, confectionary, soft drinks, effervescent salts; acidifier, dispersing agent; medicines; acidulant and antioxidant in foods, sequestering agent, water-conditioning agent and detergent builder; cleaning and polishing stainless steel and other metals; alkyd resins; mordant; removal of sulfur dioxide for smelter waste gases, abscission of citrus fruit in harvesting; cultured dairy products, buffer solutions, pharmaceutical syrups, 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

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

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

GHS label elements, including precautionary statements

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Pictograms



Signal word

Warning

Hazard statement(s)

H319

Causes serious eye irritation

Precautionary statement(s)

P264

Wash hands thoroughly after handling.

P280

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

P305+P351+P338

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

P337+P313

If eye irritation persists: Get medical advice/attention.

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight	210.14
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Component	Identification	Weight %	Classifications
Citric acid monohydrate	CAS no.: 5949-29-1 EC no.: 201-069-1	100 %	CLASSIFICATIONS: Eye damage/irritation, Cat. 2A. HAZARDS: 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. 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. If persistent irritation occurs, obtain medical attention.

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

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

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Small fire: Use dry chemical, CO₂, water spray or foam.

Large fire: Use water spray, fog or foam.

Specific hazards arising from the chemical

May liberate toxic fumes in fire including carbon oxides.

Special protective actions for fire-fighters

Wear SCBA and structural firefighter's uniform.

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.

SECTION 7: Handling and storage

Precautions for safe handling

Use personal protective equipment as required. Keep container closed when not in use. Never return spills in original containers for re-use. Keep out of the reach of children.

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.

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.

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

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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.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Solid
Appearance	Colourless, translucent crystals or white powder.
Color	No data available.
Odor	Odourless.
Odor threshold	No data available.
Melting point/freezing point	135-152 °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	173.9 °C (C.C.)
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	1.85 (50 g/l, H ₂ O, 25 °C)
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Soluble (1630 g/L @ 20 °C) Solubility in Organic Solvents: Very soluble in alcohol. Soluble in ether.
Partition coefficient n-octanol/ water (log value)	log P(o/w): -1.72 (20 °C)(anhydrous substance)
Vapor pressure	<0.1 hPa (20 °C) (anhydrous substance)
Evaporation rate	No data available.
Density and/or relative density	Specific Gravity: 1.542
Relative vapor density	No data available.
Particle characteristics	No data available.

Supplemental information regarding physical hazard classes

No data available.

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Further safety characteristics (supplemental)

Other Information: Taste: Strongly acidic taste.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.

Chemical stability

Stable. Efflorescent in dry air.

Possibility of hazardous reactions

Violent reactions possible with metals, oxidizing agents, bases and reducing agents.

Hazardous Polymerization: Will not occur.

Conditions to avoid

Strong heating (releases water of crystallisation).

Incompatible materials

Oxidising agents, metals, bases, reducing agents and nitrates.

Hazardous decomposition products

May liberate toxic fumes in fire including carbon oxides.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Acute Toxicity - Oral: LD50 Oral - Rat - male - 11,700 mg/kg
(OECD Test Guideline 401)

Ingestion: May cause slight irritations of mucous membranes of the stomach, coughing, pain and bloody vomiting.

Inhalation: May cause slight irritation to the respiratory system.

Skin corrosion/irritation

May be slightly irritating to skin.

Serious eye damage/irritation

Causes serious eye irritations.

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.

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Specific target organ toxicity (STOT) - repeated exposure

Not classified based on available information.

Aspiration hazard

Not classified based on available information.

SECTION 12: Ecological information

Toxicity

This material has a high biological oxygen demand, and it may cause significant oxygen depletion in aquatic systems. This product is expected to be readily biodegradable and is not likely to bioconcentrate. When diluted with a large amount of water, this chemical released directly or indirectly into the environment is not expected to have a significant impact.

[8X] Acute Toxicity - Fish: LC50 (L. idus): 440-760 mg/l/96 h (anhydrous substance).

[8Y] Acute Toxicity - Daphnia: EC50 (Daphnia magna): ~120 mg/l/72 h (anhydrous substance).

[90] Acute Toxicity - Bacteria: EC5 (Ps. putida): >10000 mg/l/16 h (anhydrous substance)(Lit.).

Persistence and degradability

Biodegradation: >98%/2d (Zahn-Wellens).

Easily eliminable.

BOD5: 0.481 g/g.

ThOD: 0.686 g/g (Lit.).

COD: 0.685 g/g.

Bioaccumulative potential

Behaviour in environmental compartments:

Distribution: log P(o/w): -1.72 (20 °C)(anhydrous substance).

No bioaccumulation is to be expected (log P(o/w)<1).

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.

Sewage disposal

Behaviour in environmental compartments:

Distribution: log P(o/w): -1.72 (20 °C)(anhydrous substance).

No bioaccumulation is to be expected (log P(o/w)<1).

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

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Australia SUSMP

Poison Schedule: NS

SECTION 16: Other information

Further information/disclaimer

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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

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)