

Infosafe No™ 1CH1Y	Issue Date : May 2020	RE-ISSUED by CHEMSUPP
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Product Name **CITRIC ACID Anhydrous**

Classified as hazardous

1. Identification

GHS Product Identifier CITRIC ACID Anhydrous

Company Name CHEMSUPPLY AUSTRALIA PTY LTD (ABN 19 008 264 211)

Address 38 - 50 Bedford Street GILLMAN
SA 5013 Australia

Telephone/Fax Number Tel: (08) 8440-2000

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

E-mail Address www.chemsupply.com.au

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, chemical for synthesis, pharmaceutical syrups, analytical chemistry and laboratory reagent.

Other Names	<u>Name</u>	<u>Product Code</u>
	CITRIC ACID Anhydrous AR	CA013
	CITRIC ACID Anhydrous LR	CL013
	2-Hydroxy-1,2,3-propanetricarboxylic acid, beta-Hydroxytricarboxylic acid, Hydroxytricarboxylic acid, beta-Hydroxy tricarboxylic acid, 1,2,3-Propanetricarboxylic acid, 2-hydroxy	

Other Information

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.

2. Hazard Identification

GHS classification of the substance/mixture Eye Damage/Irritation: Category 2A
Skin Corrosion/Irritation: Category 2
Specific Target Organ Toxicity - Single Exposure Category 3 (respiratory tract irritation)

Signal Word (s) WARNING

Hazard Statement (s) H319 Causes serious eye irritation.
H315 Causes skin irritation.
H335 May cause respiratory irritation.

Pictogram (s) Exclamation mark



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Precautionary statement – Prevention	P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear eye protection/face protection.
Precautionary statement – Response	P302+P352 IF ON SKIN: Wash with plenty of soap and water. P332+P313 If skin irritation occurs: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312 Call a POISON CENTER or 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. P337+P313 If eye irritation persists: Get medical advice/attention.
Precautionary statement – Storage	P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.
Precautionary statement – Disposal	P501 Dispose of contents/container to an approved waste disposal plant.

3. Composition/information on ingredients

Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Citric acid anhydrous	77-92-9	100 %

4. First-aid measures

Inhalation	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.
Ingestion	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 if symptoms persist.
Skin	Wash affected areas with copious quantities of water. If swelling, redness, blistering or irritation occurs seek medical advice. Remove contaminated clothing and wash before re-use.
Eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. If rapid recovery does not occur, obtain medical attention
First Aid Facilities	Maintain eyewash fountain and safety shower in work area.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of the patient.
Other Information	For advice, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 764 766) or a doctor at once.

5. Fire-fighting measures

Hazards from Combustion Products	May liberate toxic fumes in fire such as oxides of carbon.
Specific Methods	Non combustible solid. Small fire: Use dry chemical, CO2, water spray or foam. Large fire: Use water spray, fog or foam. If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out.
Decomposition Temp.	175 °C
Precautions in connection with Fire	Wear SCBA and structural firefighter's uniform.

6. Accidental release measures

Personal Precautions	Avoid inhalation, contact with skin, eyes and clothing.
Personal Protection	Wear protective clothing specified for normal operations (see Section 8)

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Clean-up Methods - Small Spillages 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.

7. Handling and storage

Precautions for Safe Handling Avoid substance contact and generation and inhalation of dust.

Conditions for safe storage, including any incompatibilities Store in a cool, dry place. Store away from oxidizing agents. Keep container tightly closed Do not store in metal containers. Store at +5 to +30 °C.

8. Exposure controls/personal protection

Other Exposure Information No exposure standards have been established for this product by Safe Work Australia, however, the TWA exposure standard for dusts/mists not otherwise specified is 10 mg/m³. All atmospheric contamination should be kept to as low a level as is workable.

Appropriate engineering controls In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. These methods should be used in preference to personal protective equipment.

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.

Eye 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.

Hand Protection Wear gloves of impervious material conforming to AS/NZS 2161: Occupational protective gloves - Selection, use and maintenance. Final choice of appropriate glove type will vary according to individual circumstances. This can include methods of handling, and engineering controls as determined by appropriate risk assessments. Avoid skin contact when removing gloves from hands, do not touch the gloves outer surface. Dispose of gloves as hazardous waste.

Personal Protective Equipment The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

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

Hygiene Measures Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. Physical and chemical properties

Form Solid

Appearance Colourless, translucent crystals or white powder.

Odour Odourless.

Decomposition Temperature 175 °C

Melting Point 153 °C (decomposition)

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Boiling Point	Decomposes before boiling.
Solubility in Water	Soluble (59.2% w/w at 20 °C)
Solubility in Organic Solvents	Very soluble in alcohol. Soluble in ether.
Specific Gravity	1.665
pH	~1.7 (100 g/l, H ₂ O, 20 °C)
Vapour Pressure	<0.1 hPa (20 °C)
Partition Coefficient: n-octanol/water	log P(o/w): -1.72 (20 °C)
Flammability	Combustible.
Auto-Ignition Temperature	345 °C
Explosion Limit - Upper	8.0 Vol %
Explosion Limit - Lower	2.3 Vol %
Molecular Weight	192.13
Other Information	Acidity: pK ₁ = 3.128, pK ₂ = 4.761, pK ₃ = 6.396 @ 25 °C Taste: Strongly acidic taste.

10. Stability and reactivity

Chemical Stability	Stable under normal use conditons.
Conditions to Avoid	Strong heating.
Incompatible Materials	Oxidising agents, metals, bases, reducing agents and nitrates.
Hazardous Polymerization	Will not occur.

11. Toxicological Information

Acute Toxicity - Oral	LD50 (rat): 54000 mg/kg.
Ingestion	Ingestion of large amounts may cause irritations of mucous membranes of the stomach, coughing, pain and bloody vomiting.
Inhalation	Irritating to respiratory system.
Skin	Irritating to skin.
Eye	Severely irritating to eyes. Risk of serious damage to eyes.
Respiratory sensitisation	Not classified based on available information.
Skin Sensitisation	Not classified based on available information.
Germ cell mutagenicity	Not classified based on available information.
Carcinogenicity	No evidence of carcinogenic properties.
Reproductive Toxicity	Not classified based on available information.
STOT-single exposure	Specific Target Organ Toxicity - Single Exposure Category 3 (respiratory tract irritation) H335 May cause respiratory irritation.
STOT-repeated exposure	Not classified based on available information.
Health Hazard	Exposure can cause vomiting, diarrhea, damage to tooth enamel and dermatitis.
Mutagenicity	No evidence of mutagenic properties.

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12. Ecological information

Persistence and degradability	Biodegradation: 98%/2d (Zahn-Wellens). Easily eliminable. BOD5: 0.526 g/g (Lit.). ThOD: 0.75 g/g (calculated). COD: 0.728 g/g (Lit.).
Bioaccumulative Potential	Behaviour in environmental compartments: Distribution: log P(o/w): -1.72 (20 °C) No bioaccumulation is to be expected (log Pow <1).
Biological Properties	Harmful effect due to pH shift.
Environmental Protection	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.

13. Disposal considerations

Disposal Considerations	Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, state and federal government regulations.
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14. Transport information

Transport Information	Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
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15. Regulatory information

Regulatory Information	Listed in the Australian Inventory of Chemical Substances (AICS). Not listed under WHS Regulation 2011, Schedule 10 - Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Poisons Schedule	Not Scheduled

16. Other Information

Literature References	'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'. Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand. Safe Work Australia, 'Hazardous Chemical Information System'. Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances'. Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment'.
Contact Person/Point	Paul McCarthy Ph. (08) 8440 2000 DISCLAIMER STATEMENT: All information provided in this data sheet or by our technical representatives is compiled from the best knowledge available to us. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, we make no warranty either expressed or implied, with respect to the completeness or accuracy to the information contained herein. ChemSupply Australia Pty Ltd accepts no responsibility whatsoever for its accuracy or for any results that may be obtained by customers from using the data and disclaims all liability for reliance on information provided in this data sheet or by our technical representatives.
Empirical Formula & Structural Formula	C6H8O7 ...End Of MSDS...

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