

Safety Data Sheet

1. Identification of the substance/preparation and of the company/undertaking

Product name Chemurgic's Citric Acid Anhydrous

Use

- additive in processed food and beverages
- additive for cosmetics
- Industrial and technical applications

Company information

Address: Chemurgic Agricultural Chemicals, Ltd.
P.O. Box 2106
Turlock, CA 95381

Phone: DAY: 209-634-2951 EVE: 209-652-7260
Email: info@chemurgic.net

Emergency phone number: INFOTRAC: 1-800-535-5053
EPA National Response Center: (800) 424-8802

2. Hazards identification

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)



Eye irritation, category 2A

Signal Word: Warning

Hazard Statements:

H319: Causes serious eye irritation.

Precautionary Statements:

P264: Wash hands thoroughly after handling.

P280: Wear 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.

3. Composition/Information on ingredients

Chemical name: 2-Hydroxy-1,2,3-propanetricarboxylic acid

EINECS number: 201 069 1

Empirical formula: C₆H₈O₇

Molecular mass: 192.12 g/mol

Synonyms

- Citric Acid
- Citric Acid Anhydrous Granular
- Citric Acid Anhydrous Fine Granular

Name	CAS-No	%	GHS-US classification
Citric Acid, Anhydrous	77-92-9	<=100%	Eye Irrit. 2A, H319

4. First-aid measures

Eye contact	Rinse immediately with tap water for 10 minutes-open eyelids forcibly. Consult physician.
Skin contact	Remove contaminated clothes. Wash affected skin with water and soap. Do not use any solvents.
Inhalation	Remove the casualty to fresh air and keep him/her clam. Consult physician.
Note to physician	Treat symptomatically.

5. Fire-fighting measures

Fire	Autoignition temperature: 1011°C (1852°F) or by contact with an ignition source.
Explosion	Fine dust dispersed in air in sufficient concentrations, and in presence of an ignition source is a potential dust explosion hazard.
Fire Extinguishing Media Special Information	Water spray, dry chemical, alcohol foam, or carbon dioxide. In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental release measures

Methods for cleaning up	Collect solid (avoid dust formation) and hand over to waste removal. Rinse with plenty of water.
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7. Handling and Storage

Precautions:	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, reducing agents, metals, alkalis.
Storage:	Keep container tightly closed. Keep container in a cool, well-ventilated area.

8. Exposure controls/Personal protection

Engineering Measures	Ensure adequate ventilation, especially in confined areas.
Monitoring	
Analytics	Sampling on glass fibre filter and gravimetric or chemical determination
Personal protective equipment	
Respiratory protection	In case of open handling of larger quantities or accidental release: particle mask or respirator with independent air supply
Hand protection	Protective gloves (neoprene, nitrile or butyl rubber)
Eye protection	Safety glasses

9. Physical and chemical properties

Appearance:	
Colour	white
Form	powder, different granular size
Odour	odourless, with a strong acidic taste
Odour threshold	No data available
pH value (20 C)	1.7 10% solution
Melting point/freezing point	152 to 154°C
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	1.665 g/cm ³ (20 C)
Bulk density	~725 kg/m ³
Solubility	~750,000 mg/l, water, soluble in ethanol and ether
Partition coefficient: n-octanol/water	log Pow -1.72 (octane/water)
Auto-ignition temperature	500°C
Decomposition temperature	No data available
Viscosity	No data available

10. Stability and reactivity

Conditions to avoid	- humidity - temperatures above 40 °C
Materials to avoid	- potassium tartrate, alkalis, alkaline earth carbonates and bicarbonates, metal nitrates, acetates, sulfides
Note	- slightly hygroscopic

11. Toxicological information

Acute toxicity	<ul style="list-style-type: none">- LD₅₀ 5'400 mg/kg (oral, mouse)- LD₅₀ >7,000 mg/kg (oral, rabbit)- LD₅₀ >6,730 mg/kg (oral, rabbit)
Subacute toxicity	<ul style="list-style-type: none">- NOEL 4'000 mg/kg/d (oral, rat; 90 days)
Local effects	<ul style="list-style-type: none">- eye: strongly irritating (rabbit)- skin: moderately irritating (rabbit)
Chronic toxicity	<ul style="list-style-type: none">- well tolerated 2000 m/kg/d (oral, rat; 90 days)
Mutagenicity	<ul style="list-style-type: none">- not mutagenic
Carcinogenicity	<ul style="list-style-type: none">- not carcinogenic (rat)- not carcinogenic (mouse)
Reproduction toxicity	<ul style="list-style-type: none">- not teratogenic
Note	<ul style="list-style-type: none">- intermediate product of human metabolism(citric acid cycle)

12. Ecological information

Inherent biodegradability	<ul style="list-style-type: none">- well inherently biodegradable 98%, 7 days (Zahn-Welllens test, OECD No. 302B)
Ecotoxicity	<ul style="list-style-type: none">- moderately toxic for planktonic crustaceans (Daphnia magna) LC₀ 80 mg/l- barely toxic for fish (goldfish) EC₀ 625 mg/l- barely toxic for microorganisms (Pseudomonas putida) EC₀(16 h) 485 mg/l- barely toxic for protozoa (Entosiphon sulcatum)- moderately toxic for algae (Microcystic aeruginosa) EC₀ 640 mg/l
Air pollution	<ul style="list-style-type: none">- observe local/national regulations

13. Disposal considerations

Waste Disposal Methods	Hazardous waste. Dispose of in compliance with the laws and regulations pertaining to this product in your jurisdiction.
Contaminated Packaging	Empty containers should be taken for local recycling, recovery or waste disposal.

14. Transport information

In accordance with DOT: Not regulated by ground transportation.

15. Regulatory information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

16. Other information

Use

- food and feed additive
- ingredient in pharmaceutical preparations, especially in Effervescent tablets
- synergist in antioxidant mixtures

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This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

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