

Citric Acid, Anhydrous, Granular USP

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Citric Acid, Anhydrous, Granular USP

Synonyms/Generic Names: Citric Acid; 2-Hydroxy-1,2,3-propanetricarboxylic acid

Product Number: 1500

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc.
N4335 Temkin Rd.
Columbus, WI. 53925

For More Information Call: 920-623-2140 (Monday-Friday 8:00-4:30)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

OSHA Hazards: Irritant

Target Organs: None Known

Signal Words: Warning

Pictograms:



GHS Classification:

Acute toxicity, Dermal	Category 5
Skin irritation	Category 3
Eye irritation	Category 2A

GHS Label Elements, including precautionary statements:

Hazard Statements:

H313	May be harmful in contact with skin.
H316	Causes mild skin irritation.
H319	Causes serious eye irritation.

Precautionary Statements:

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.
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Potential Health Effects

Eyes	Causes eye irritation.
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Ingestion	May be harmful if swallowed.

NFPA Ratings

Health	2
Flammability	1
Reactivity	0
Specific hazard	Not Available

HMIS Ratings

Health	2
Fire	1
Reactivity	0
Personal	E

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Citric Acid, Anhydrous	100	77-92-9	201-069-1	C ₆ H ₈ O ₇	192.12 g/mol

4. FIRST-AID MEASURES

Eyes	In case of eye contact, rinse with plenty of water and seek medical attention.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards arising from the chemical	Emits toxic fumes (carbon oxides) under fire conditions. (See also Stability and Reactivity section).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	Pick up and arrange disposal without creating dust. Sweep up and shovel. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

Personal Protection

Eyes	Wear chemical safety glasses with side shields or goggles.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear nitrile or rubber gloves, apron or lab coat.
Other	Not Available

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	White crystalline solid.
Odor	Odorless
Odor threshold	Not Available
pH	1.8 at ca. 50 g/l at 25°C (77°F)
Melting point/freezing point	153°C (307°F)
Initial boiling point and boiling range	175°C
Flash point	100°C (212°F)
Evaporation rate	Not Available
Flammability (solid, gas)	Flammable solid when heated above flash point.
Upper/lower flammability or explosive limit	LEL: 0.28%; UEL: 2.29%
Vapor pressure	Not Available
Vapor density	Not Available
Density	1.665 g/cm ³
Solubility (ies)	Soluble in water; 383 g/l at 25°C (77°F)
Partition coefficient: n-octanol/water	Log Pow: -1.64 at 20°C (68°F)
Auto-ignition temperature	1,010°C (1,850°F)
Decomposition temperature	175°C

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Excess heat.
Incompatible Materials	Strong oxidizing agents, bases, reducing agents, nitrates.
Hazardous Decomposition Products	Carbon oxides

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Skin	LD50 Dermal – rat - >2,000 mg/kg
Eyes	Eyes – rabbit – Irritating to eyes – OECD Test Guideline 405
Respiratory	Not Available
Ingestion	LD50 Oral – rat – 5,400 mg/kg

Carcinogenicity

IARC	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Skin	Irritation, itching, swelling, redness, and pain.
Eyes	Irritation, itching, redness, pain.
Respiratory	Irritation.
Ingestion	Gastrointestinal discomfort and possible pain.

Chronic Toxicity	Respiratory sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Vertebrate	Mortality LC50 – Leuciscus idus melanotus – 440 mg/l – 48 hours Method: OECD Test Guideline 203
Aquatic Invertebrate	Static test – Daphnia magna (water flea) – 1,535 mg/l – 24 hours
Terrestrial	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/ICAO	Not Dangerous Goods

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Citric Acid
SARA 312	Citric Acid
SARA 313	Not Listed
WHMIS Canada	Class E: Corrosive material.

16. OTHER INFORMATION

Revision	Date
Revision 1	07-09-2012

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