

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** Citric Acid Monohydrate - USP Food Grade  
**Synonyms:** Citric Acid  
**CAS Number:** 5949-29-1  
**Grade/Purity:** Food Grade  
**Product Type:** Acids  
**Product Use:** Industrial, Manufacturing or Laboratory use  
**Manufacturer/Supplier:** Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574  
**Information:** 512-365-6838 | [www.alliancechemical.com](http://www.alliancechemical.com)  
**Emergency:** CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

**2. HAZARDS IDENTIFICATION**

**Signal Word:** Warning

**GHS Pictograms:**



**Hazard Statements:**

H315 (14.2%)	Causes skin irritation [Warning Skin corrosion/irritation]
H319 (93.2%)	Causes serious eye irritation [Warning Serious eye damage/eye irritation]
H335 (45.3%)	May cause respiratory irritation [Warning Specific target organ toxicity, single exposure; Respiratory tract irritation]

**Precautionary Statements:**

P261,	P264, P264+P265, P271, P280, P302+P352, P304+P340, P305+P351+P338, P319, P321, P332+P317, P337+P317, P362+P364, P403+P233, P405, and P501
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**3. COMPOSITION / INFORMATION ON INGREDIENTS**

COMPONENT	% MIN	% MAX	CAS #	EINECS# / ELINCS#	FORMULA	MOLECULAR WEIGHT
Citric Acid Monohydrate	99.5	100.5	5949-29-1	227-807-0	C6H10O8	210.14 g/mol

**4. FIRST-AID MEASURES**

<b>Eyes</b>	Rinse with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention immediately.
<b>Skin</b>	Remove contaminated clothes. Rinse skin with plenty of water or shower.
<b>Inhalation</b>	Move person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
<b>Ingestion</b>	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

## 5. FIRE-FIGHTING MEASURES

<b>Suitable Media</b>	Use water spray, alcohol-resistant foam, dry chemical, or CO <sub>2</sub> . Use measures appropriate to local circumstances.
<b>Unsuitable Media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Protective Equipment</b>	Wear self-contained breathing apparatus and full protective clothing.
<b>Combustion Products</b>	May include carbon oxides and other toxic fumes. See Section 10.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
<b>Environmental</b>	Prevent leakage or spillage from entering drains, sewers, or waterways.
<b>Containment &amp; Cleanup</b>	Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations.

## 7. HANDLING AND STORAGE

<b>Safe Handling</b>	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
<b>Safe Storage</b>	Store in a cool, dry, well-ventilated area. Keep away from incompatible materials (see Section 10). Keep containers tightly closed.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

**Occupational Exposure Limits:**

No established occupational exposure limits.

<b>Eyes</b>	Wear chemical safety goggles or face shield.
<b>Skin</b>	Wear chemical-resistant gloves and protective clothing.
<b>Inhalation</b>	Use NIOSH-approved respirator if exposure limits are exceeded or irritation occurs.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Translucent
<b>Odor</b>	Characteristic
<b>Median Particle Size</b>	Not Available
<b>Particle Size Distribution</b>	Not Available
<b>Particle Shape</b>	Not Available
<b>Surface Area</b>	Not Available
<b>Dustiness</b>	Not Available
<b>Hygroscopicity</b>	Not Available
<b>pH</b>	Not Available
<b>Melting Point</b>	100°C (212°F)
<b>Boiling Point</b>	175°C (347°F)
<b>Flash Point</b>	385°C (725°F)
<b>Vapor Pressure</b>	Not Available
<b>Specific Gravity</b>	Not Available
<b>Solubility</b>	Highly soluble in water, moderate in alcohol
<b>Molecular Formula</b>	C <sub>6</sub> H <sub>10</sub> O <sub>8</sub>
<b>Molecular Weight</b>	210.14 g/mol

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Hazardous Reactions</b>	None under normal processing conditions.
<b>Conditions to Avoid</b>	Heat, sparks, open flame, and incompatible materials.
<b>Incompatible Materials</b>	Strong oxidizing agents, strong acids, strong bases.
<b>Decomposition Products</b>	May produce carbon oxides and other toxic fumes when heated to decomposition.

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** See Section 2 for GHS hazard classification.

<b>IARC</b>	Not listed as carcinogen.
<b>NTP</b>	Not listed as carcinogen.
<b>OSHA</b>	Not listed as carcinogen.

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Algae ErC50: > 640 mg/L (168 h, Scenedesmus quadricauda — 7-d EC0 640 (EC50 > 640). Bridged from anhydrous.); Daphnia EC50: 85 mg/L (24 h, Daphnia magna — not neutralised (acid effect); neutralised EC50 1535 mg/L. Bridged from anhydrous.); Fish LC50: ~ 440 mg/L (96 h, Leuciscus idus — solution not neutralised (acid effect); range 440–760 mg/L. Bridged from anhydrous 77-92-9.)
<b>Persistence</b>	Not persistent — Readily biodegradable (97% CO <sub>2</sub> / 100% DOC, modified Sturm ~28 d)
<b>Bioaccumulation</b>	log Kow -1.72 (20 °C), BCF 0.01 (estimated; no bioaccumulation, natural Krebs-cycle metabolite)
<b>Mobility in Soil</b>	Highly mobile; ~99.99% partitions to water

## 13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

## 14. TRANSPORT INFORMATION

<b>US DOT</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>IATA/ICAO</b>	Not regulated as dangerous goods.
<b>Marine Pollutant</b>	No
<b>Note</b>	Hazard communication note: Product may meet GHS hazard criteria for workplace handling, while not being regulated as dangerous goods for transport.

## 15. REGULATORY INFORMATION

Regulatory listings not yet on file in this system; consult OSHA, EPA TSCA, EPCRA TRI, and California OEHHA directly.

<b>SARA 311/312</b>	See Section 2 for hazard classifications.
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## 16. OTHER INFORMATION

**Revision Date:** 06/26/2026

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