

**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
-------	---

**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 CO2. 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

<b>Regulatory listings not yet on file in this system; consult OSHA, EPA TSCA, EPCRA TRI, and California OEHHA directly.</b>	
<b>SARA 311/312</b>	See Section 2 for hazard classifications.

## 16. OTHER INFORMATION

**Revision Date:** 07/01/2026

**Disclaimer:** The information provided in this Safety Data Sheet is correct to the best of our knowledge at the date of publication. It relates only to the specific product identified and does not relate to its use in combination with other materials. ALLIANCE CHEMICAL MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ALLIANCE CHEMICAL DOES NOT ASSUME LIABILITY FOR LOSS, INJURY, DAMAGE, OR EXPENSE ARISING FROM THE HANDLING, STORAGE, USE, OR DISPOSAL OF THIS PRODUCT.