

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Citric Acid Anhydrous - ACS Reagent Grade

Synonyms: citric acid, Citric Acid Anhydrous

CAS Number: 77-92-9

Grade/Purity: ACS Reagent

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

Emergency: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

Signal Word: Warning

GHS Pictograms:



Hazard Statements:

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|------|--------------------------------------------------------------------------------------------------------------------------|
| H319 | Causes serious eye irritation [Warning Serious eye damage/eye irritation] |
| H335 | May cause respiratory irritation [Warning Specific target organ toxicity, single exposure; Respiratory tract irritation] |

Precautionary Statements:

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|-------|----------------------------------------------------------------------------------------------|
| P261, | P264+P265, P271, P280, P304+P340, P305+P351+P338, P319, P337+P317, P403+P233, P405, and P501 |
|-------|----------------------------------------------------------------------------------------------|

3. COMPOSITION / INFORMATION ON INGREDIENTS

| COMPONENT | CAS # | FORMULA | MOLECULAR WEIGHT | CONCENTRATION |
|-----------------------|---------|----------------------------------------------|------------------|-------------------------------|
| Citric Acid Anhydrous | 77-92-9 | C ₆ H ₈ O ₇ | 192.12 g/mol | ACS grade (see specification) |

4. FIRST-AID MEASURES

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| Eyes | EYES: First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital or poison control center. Do not put any ointments, oils, or medication in the victim's eyes without specific instructions from a physician. If symptoms (such as redness or irritation) develop, immediately transport the victim to a hospital. |
| Skin | Rinse skin with plenty of water or shower. Refer for medical attention . |
| Inhalation | INHALATION: IMMEDIATELY leave the contaminated area; take deep breaths of fresh air. If symptoms (such as wheezing, coughing, shortness of breath, or burning in the mouth, throat, or chest) develop, call a physician and be prepared to transport the victim to a hospital. Provide proper respiratory protection to rescuers entering an unknown atmosphere. Whenever possible, Self-Contained Breathing Apparatus (SCBA) should be used; if not available, use a level of protection greater than or equal to that advised under Protective Clothing. |
| Ingestion | INGESTION: DO NOT INDUCE VOMITING. If the victim is conscious and not convulsing, give 1 or 2 glasses of water to dilute the chemical and IMMEDIATELY call a hospital or poison control center. Be prepared to transport the victim to a hospital if advised by a physician. If the victim is convulsing or unconscious, do not give anything by mouth, ensure that the victim's airway is open and lay the victim on his/her side with the head lower than the body. DO NOT INDUCE VOMITING. IMMEDIATELY transport the victim to a hospital. (NTP, 1992) |

5. FIRE-FIGHTING MEASURES

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| Suitable Media | Use water spray, alcohol-resistant foam, dry chemical, or CO2. Use measures appropriate to local circumstances. |
| Unsuitable Media | Do not use a solid water stream as it may scatter and spread fire. |
| Protective Equipment | Wear self-contained breathing apparatus and full protective clothing. |
| Combustion Products | May include carbon oxides and other toxic fumes. See Section 10. |

6. ACCIDENTAL RELEASE MEASURES

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

7. HANDLING AND STORAGE

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| Safe Handling | Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use. |
| Safe Storage | 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.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

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|-------------------|----------------------------------------------|
| Appearance | White crystalline powder |
| Odor | Characteristic |
| pH | Not Available |
| Melting Point | 153°C (307°F) |
| Boiling Point | 175°C (347°F) |
| Flash Point | 385°C (725°F) |
| Vapor Pressure | Not Available |
| Specific Gravity | Not Available |
| Solubility | Highly soluble in water, moderate in alcohol |
| Molecular Formula | C ₆ H ₈ O ₇ |
| Molecular Weight | 192.12 g/mol |

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: See Section 2 for GHS hazard classification.

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| IARC | Not listed as carcinogen. |
| NTP | Not listed as carcinogen. |
| OSHA | Not listed as carcinogen. |

12. ECOLOGICAL INFORMATION

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| Ecotoxicity | Data not available. Avoid release to the environment. |
| Persistence | Not Available |
| Bioaccumulation | Not Available |
| Mobility in Soil | Not Available |

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

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

15. REGULATORY INFORMATION

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|---------------------------|------------------------------------------------------------------|
| TSCA Inventory | All ingredients are listed on the TSCA Active inventory. |
| California Prop 65 | Refer to California Proposition 65 list for current status. |
| SARA 311/312 | See Section 2 for hazard classifications. |
| SARA 313 | Refer to EPA Toxic Release Inventory for current listing status. |

16. OTHER INFORMATION

Revision Date: 03/31/2026

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