

PRODUCT IDENTIFICATION



Product Name: Citric Acid Anhydrous - Food Grade

CAS Number: 77-92-9

Molecular Formula: $C_6H_8O_7$

Molecular Weight: 192.12 g/mol

Grade: Food Grade

Purity / Concentration: Not Available

Synonyms: Not Available

PRODUCT OVERVIEW

Citric Acid Anhydrous is a high-purity white crystalline powder, boasting an assay of 99.9% and exceptionally low impurity levels, such as lead being not detected. This food-grade additive is essential for applications requiring precise pH control and reliable chemical consistency.

Grade Significance: Food Grade status ensures that the product meets stringent safety and purity standards, guaranteeing it is free from harmful contaminants and suitable for human consumption or sensitive industrial applications.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc Density	%	99.9	99.5	100.5	GC or density
Color (APHA)	APHA	100.0	99	100.0	APHA
Ash Residue On Ignition	%	0.01	0	0.05	Ignition
Water Karl Fischer	%	0.1	0	8.8	Karl Fischer
Arsenic As	ppm	0.01	0	1	ICP-MS
Calcium	%	ND	0	0.01	Per specification
Lead Pb	ppm	ND	0	0.5	ICP-MS
Particle Size	μm	10	0	20	Sieve Analysis
Turbidity	NTU	0.5	0	3	EPA 180.1

Values based on 1 batch tested. ND = Not Detected.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	White crystalline powder	Form	Crystal
Boiling Point	Decomposes (NTP, 1992)	Melting / Freezing Point	307 °F (anhydrous) (NTP, 1992)
Flash Point	100°C (212°F)	Solubility	Highly soluble in water, moderate in alcohol
Molecular Formula	$C_6H_8O_7$	Molecular Weight	192.12 g/mol

APPLICATIONS

1. **Food and Beverage** — Used as a natural preservative and acidulant to enhance flavor profiles and maintain shelf stability in various consumable products.
2. **Pharmaceutical** — Serves as an excipient in medication formulations to stabilize active ingredients and balance the pH of liquid preparations.
3. **Cleaning and Sanitation** — Utilized as a powerful, eco-friendly chelating agent to remove mineral deposits and scale from industrial equipment.
4. **Cosmetics and Personal Care** — Acts as a pH adjuster in skincare formulations to ensure products are gentle on the skin while maintaining efficacy.
5. **Laboratory Research** — Provides a consistent, high-purity buffer component for analytical chemistry and biochemical testing procedures.

STORAGE & HANDLING

Citric Acid Anhydrous must be stored in a cool, dry, well-ventilated area to prevent moisture absorption and clumping. Proper containment is essential to minimize dust generation, as the powder can cause respiratory and eye irritation if improperly handled.

AVAILABLE PACKAGING

- 2 lbs.
- 5 Lbs.
- 55 Lbs.

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Warning**



Hazard Statements:

- H319: Causes serious eye irritation
- H335: May cause respiratory irritation

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

For complete safety information, refer to the Safety Data Sheet (SDS) for this product.

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