



PRODUCT SPECIFICATION

Product: Citric Acid Anhydrous

Description

Citric Acid Anhydrous consists of colorless crystals or a white, granular to fine powder, practically odorless, with a strong acid taste.

Product identification

| | |
|---------------------------|---|
| Chemical name: | 2-hydroxy-1,2,3-propanetricarboxylic acid |
| Synonyms: | citric acid |
| CAS No.: | 77-92-9 |
| EINECS No.: | 201-069-1 |
| INCI name: | Citric Acid |
| Empirical formula: | $C_6H_8O_7$ |
| Molecular mass: | 192.12 g/mol |

Specifications

| | |
|---|--|
| Appearance: | colorless crystals or white, granular to fine powder |
| Identity: | corresponds |
| Water (K. Fischer): | max. 0.2% |
| Extraneous matter: | passes test |
| Heavy metals: | max. 1 ppm |
| Arsenic: | max. 1 ppm |
| Lead: | max. 0.5 ppm |
| Mercury: | max. 1 ppm |
| Copper: | max. 1 ppm |
| Zinc: | max. 1 ppm |
| Iron: | max. 1 ppm |
| Barium: | max. 1 ppm |
| Calcium: | max. 10 ppm |
| Magnesium: | max. 1 ppm |
| Aluminium: | max. 0.2 ppm |
| Chlorides: | max. 5 ppm |
| Sulphates: | max. 30 ppm |
| Oxalates: | max. 10 ppm |
| Readily carbonizable substances: | passes test |
| Related substances: | passes test |



Sulphated ash: meets USP requirements
Organic volatile impurities: meets USP requirements
Tridodecylamine: meets FCC requirements
Polycyclic aromatic hydrocarbons: meets JP requirements
Colour (500 g/L, T at 405 nm, 1 cm): min. 98%
Assay: 99.8–100.2% (on anhydrous substance)

Fineness (US standard sieves):

Medium Granular 1200

| | | |
|---------|------------------------------|----------|
| On | No. 16 (1190 μm) | max. 5% |
| Through | No. 35 (500 μm) | max. 10% |

Fine Granular 700

| | | |
|---------|-----------------------------|---------|
| On | No. 25 (707 μm) | max. 5% |
| Through | No. 50 (297 μm) | max. 5% |

Fine Granular 51N

| | | |
|---------|------------------------------|---------|
| On | No. 30 (595 μm) | max. 5% |
| Through | No. 100 (149 μm) | max. 5% |

Fine Granular 16/40

| | | |
|---------|------------------------------|---------|
| On | No. 40 (420 μm) | max. 5% |
| Through | No. 100 (149 μm) | max. 5% |

Powder

| | | |
|---------|-----------------------------|----------|
| On | No. 60 (250 μm) | max. 5% |
| Through | No. 200 (74 μm) | min. 65% |

Uses

As an acidulant, flavor enhancer and sequestering agent in processed food and beverages, and as a synergist in antioxidant mixtures.

For pharmaceutical preparations, especially effervescent tablets. For personal care products.