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: C6H8O7
- 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:
  - 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  
**Tridecylamine:** 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.