



Citric Acid Anhydrous Powder, USP

Appearance

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

Product identification

Chemical name: 2-hydroxy-1,2,3-propanetricarboxylic acid

Synonyms: Citric Acid Anhydrous Powder

CAS No.: 77-92-9

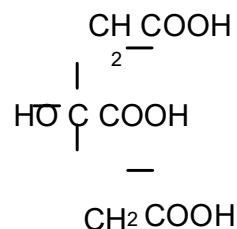
EINECS No.: 201-069-1

E No: E 330

INCI name: Citric Acid

Empirical formula: $C_6H_8O_7$

Molecular mass: 192.12 g/mol



Specifications

Odour	odourless	Barium	< 1 ppm
Identification	meets requirements	Copper	< 1 ppm
Water (K. Fischer)	0.000 – 0.200 %	Zinc	< 1 ppm
Extraneous matter	passes test	Iron	< 1 ppm
Colour (500 g/L, T at 405 nm, 1 cm)	98.00 – 100.00 %	Calcium	< 10 ppm
Appearance of solution	meets EP requirements (visual test)	Magnesium	< 1 ppm
Clarity of solution	meets USP requirements (colour:%T)	Aluminium	< 0.2 ppm
Colour of solution	meets USP requirements (colour:%T)	Chlorides	< 5 ppm
Readily carbonizable substances RCS	meets requirements	Sulphates	< 30 ppm
Heavy metals (sum: Cd, Cr, Cu, Pb, Hg, Zn, Ni)	< 1 ppm	Oxalates / oxalic acid	< 10 ppm
Arsenic	< 1 ppm	Sulphated ash / Residue on ignition	meets FCC requirements (NMT 0.05% on 4g)
Lead	< 0.5 ppm	Assay	99.80 –100.20 % (on anhydrous substance)

Mercury	< 1 ppm	Tridodecylamine	not applicable for Advatech, only for solvent extracted citric acid
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Solubility

Citric Acid Anhydrous Powder is very soluble in water, freely soluble in ethanol and sparingly soluble in ether.

Stability and storage

Citric Acid Anhydrous Powder may be stored for 36 months from the date of manufacture in the unopened original packaging (bags and big bags). A relative humidity of 50% and a temperature range of 10 –30 °C are the most suitable conditions for storage. Temperatures above 40 °C and a relative humidity above 70% should be avoided in order to prevent caking, especially the Fine Granular and Powder forms. The stacking of the Fine Granular and Powder forms for long periods is not recommended. Stability tests have shown that citric acid anhydrous is chemically stable for at least five years in tightly closed packaging under proper storage conditions.

Uses

- As an acidulant, flavour enhancer and sequestering agent in food applications and beverages, and as a synergist in antioxidant mixtures.
- For cosmetics and personal care products.
- For pharmaceutical preparations, especially effervescent tablets.
- This product is not intended for use in the manufacture of sterile drug products. The purchaser assumes all responsibility for additional processing, testing, labelling and registration required for such use.

Compendial compliance

Citric Acid Anhydrous Powder meets all requirements of the USP, FCC, Ph. Eur., JP, JECFA and the Commission regulation (EC) No 231/2012 when tested according to the latest versions of these compendia.

Citric Acid Anhydrous is classified as a GRAS (Generally Recognized As Safe) substance following the US Food and Drug Administration (FDA).

Safety

This product is safe for the intended use. Avoid inhalation of dust, contact with eyes and prolonged contact with skin by applying suitable protective measures and personal hygiene.

For full safety information and necessary precautions, please refer to the respective Material Safety Data Sheet.

Legal notice

The information given in this publication is based on our current knowledge and experience, and may be used at your discretion and risk. It does not relieve you from carrying out your own precautions and tests. We do not assume any liability in connection with your product or its use. You must comply with all applicable laws and regulations, and observe all third party rights.

