

Product Data Sheet Citric Acid Solutions Food Grade

Version: PDS Citric Acid Solution Food Grade Version 07	Issue date: 16/03/2022	Supersedes versions: 26/08/2021
Reason for issue: Delete solution 47% + new logo		PDS-04 33004 Version 06 Citric Acid Solution 46% Food Grade PDS-04 33020 Version 06 Citric Acid Solution 50% Food Grade

Appearance

Citric Acid Solutions Food Grade are clear aqueous solutions of citric acid, practically colourless, 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
E No: E 330
INCI name: Citric Acid
Empirical formula: C₆H₈O₇
Molecular mass: 192.12 g/mol

CH₂—COOH | | HO—C—COOH | | CH₂—COOH

Specifications

Odour	odourless	Copper	< 1 ppm
Identification	meets requirements	Zinc	< 1 ppm
Extraneous matter	passes test	Iron	< 5 ppm
Colour (500 g/L, T at 405 nm, 1 cm)	97.00 – 100.00 %	Calcium	< 20 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
Heavy metals (sum: Cd, Cr, Cu, Pb, Hg, In, Ni)	< 1 ppm	Sulphates	< 50 ppm





Arsenic	<1 ppm	Oxalates / oxalic acid	< 10 ppm
Lead	< 0.5 ppm	Sulphated ash / Residue on ignition	meets FCC requirements (NMT 0.05% on 4g)
Barium	< 1 ppm	Assay	46.00 - 46.50 % (46%) 50.00 - 50.50% (50%) titration with 0,5N NaOH (as anhydrous)
Mercury	< 1 ppm	Tridodecylamine	not applicable for Citribel, only for solvent extracted citric acid

Percentage solution	Product Code
Citric Acid Solution 46 %	04 33004
Citric Acid Solution 50 %	04 33020

Solubility

Citric Acid Solutions Food Grade are freely miscible with water in all proportions.

Stability and storage

Citric Acid Solutions Food Grade should be stored in well-closed containers of a suitable stainless steel. Solutions 46%/50% may be stored for twelve months from the date of manufacture at a temperature not below 5°C (to avoid crystallization) and not above 30°C (to minimize evaporation).

At their original concentrations, the solutions do not permit the growth of micro-organisms.

Uses

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

Compendial compliance

Citric Acid Solutions Food Grade meet 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 Solutions Food Grade are classified as a GRAS (Generally Recognized As Safe) substance following the US Food and Drug Administration (FDA).

Safety

These products are safe for the intended use. Avoid contact with eyes and prolonged contact with skin by applying suitable protective measures and personal hygiene.

These products are safe for the intended use. Avoid ingestion, inhalation of dust or direct contact 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.

Citribel nv

Phone: +32 (0) 16 80.62.11 Fax: +32 (0) 16 80.66.11 E-mail: Citribel@citribel.com

