

Product Data Sheet

Trisodium Citrate Dihydrate

Version: PDS Trisodium Citrate Dihydrate Version 09	Issue date: 10/11/2023	Supersedes versions: 28/02/2022
Reason for issue: Addition of TSC powder		PDS 04 12503 Version 08 Trisodium Citrate Dihydrate Granular PDS 04 12325 Version 08 Trisodium Citrate Dihydrate Fine Granular PDS 04 12481 Version 01 Trisodium Citrate Dihydrate Powder

Appearance

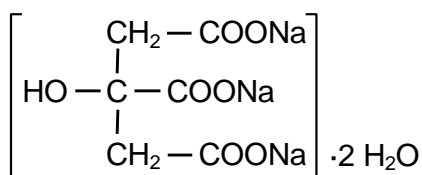
Trisodium Citrate Dihydrate consists of colourless crystals or a white, granular to fine powder, practically odourless, with a saline taste.

Product identification

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

Synonyms: trisodium citrate dihydrate; citric acid, trisodium salt, dihydrate; sodium citrate dihydrate

CAS No.:	6132-04-3
EINECS No.:	200-675-3
E No:	E 331 (iii)
INCI name:	Sodium citrate
Empirical formula:	C ₆ H ₅ Na ₃ O ₇ · 2H ₂ O
Molecular mass:	294.10 g/mol



Specifications

Odour	odourless	Barium	< 5 ppm
Identification	meets requirements	Copper	< 1 ppm
Water (K. Fischer)	12.15 – 12.50 %	Zinc	< 1 ppm
Extraneous matter	passes test	Iron	< 5 ppm
pH (aqueous solution 5%)	8.00 – 8.70	Calcium	< 20 ppm
Colour (250 g/L, T at 366 nm, 1 cm)	92.00 – 100.00 %	Magnesium	< 2 ppm
Appearance of solution	meets EP requirements	Chlorides	< 5 ppm

	(visual test)		
Clarity of solution	meets requirements	Sulphates	< 30 ppm
Colour of solution	meets requirements (colour:%T)	Oxalates / oxalic acid	< 10 ppm
Readily carbonizable substances RCS	meets requirements	Tartrates	< 5 ppm
Heavy metals <small>(sum: Cd, Cr, Cu, Pb, Hg, Zn, Ni)</small>	< 1 ppm	Assay	99.70 – 100.30 %
Arsenic	< 1 ppm	Acidity or alkalinity	meets requirements
Lead	< 1 ppm	Bulk density (on request)	900 – 1100 g/l
Mercury	< 1 ppm		

Fineness (ISO standard sieves) / MESH		Product Code
Granular		
On No. 16 (1180 µm)	max. 5%	04 12503
Through No. 40 (425 µm)	max. 10%	
Fine Granular		
On No. 30 (600 µm)	max. 5%	04 12325
Through No. 100 (150 µm)	max. 5%	
Powder		
On No. 60 (250 µm)	max. 5%	04 12481
Through No. 200 (75 µm)	min. 65%	

Solubility

Trisodium Citrate Dihydrate is freely soluble in water, and practically insoluble in ethanol.

Stability and storage

Trisodium Citrate Dihydrate 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.

The stacking of the Fine Granular form for long period is not recommended.

Stability tests have shown that trisodium citrate dihydrate is chemically stable for at least five years in tightly closed packaging under proper storage conditions.

Uses

- For solid and liquid food preparations.
- For personal care products.
- 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

Trisodium Citrate Dihydrate 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.

Trisodium Citrate Dihydrate 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.

Citribel nv

Phone: +32 (0) 16 80.62.11

Fax : +32 (0) 16 80.66.11

E-mail : Citribel@citribel.com



Citribel nv

Pastorijstraat 249, 3300 Tienen, Belgium

Tel: +32(0) 16 806 211 | www.citribel.com | V.A.T. BE 0400 934 652