

SPECIFICATION

Product Name: Calcium Citrate USP Grade
Chemical Formula: $\text{Ca}_3(\text{C}_6\text{H}_5\text{O}_7)_2 \cdot 4\text{H}_2\text{O}$
CAS Number: 5785-44-4
Molecular Weight: 534.39 g/mol
Appearance: A white crystalline powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Identification (A) (B)	- -	Complies Complies	(A) A White precipitate is formed. (B) A voluminous white precipitate is formed, and it is soluble in hydrochloric acid.
Loss on drying	%	11.8%	10.0 % to 13.3 %
Arsenic	PPM	Complies	NMT 3 PPM
Heavy Metals	PPM	Complies	NMT 20 PPM
Residual solvents	-	Complies	Solvent are not used in our manufacturing process.
Fluoride	%	Complies	NMT 0.003%
Acid-insoluble substances	%	0.13%	NMT 0.2%
Lead	PPM	Complies	NMT 10 PPM
Assay (On dried basis)	%	99.4%	97.5% to 100.5%
Microbiological Test			
Total aerobic count	cfu/g	100 cfu/g	NMT 1000 cfu/g

Total yeast and mould	cfu/g	30 cfu/g	NMT 100 cfu/g
E. coli	-	Absent	Absent
S. aureus	-	Absent	Absent
Salmonella	-	Absent	Absent
P. aureus	-	Absent	Absent

Physical Properties

- Solubility: Soluble in water. Insoluble in ethanol. Insoluble in acetone.

Shelf Life & Storage

- Shelf Life: 2 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a cool, dry, and well-ventilated place. Keep the container tightly closed to protect from moisture. Store away from excessive heat, humidity, and direct sunlight in the original, properly labeled container.

Applications

- Use: Widely used as a calcium supplement to help prevent and treat calcium deficiency. It supports bone and teeth health, muscle function, nerve transmission, and normal physiological processes. It is widely used in pharmaceutical, nutraceutical, and dietary supplement formulations.
- Dosage: Depends on the intended formulation, the amount of elemental calcium required, and the patient's age and clinical condition. It should be used according to product formulation requirements or as directed by a qualified healthcare professional.

Packaging

- Standard Packing: 25 Kgs pp bag with inner liner or as per customer requirement.
- Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.

* Specifications are based on the manufacturer's provided specifications.