

SPECIFICATION

Product Name: Calcium Ascorbate IP Grade
Chemical Formula: C ₁₂ H ₁₄ CaO ₁₂
CAS Number: 5743-28-2
Molecular Weight: 426.34 g/mol
Appearance: White crystalline powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Identification			
A.	-	Complies	The substance gives reaction of calcium.
B.	-	Complies	Solution decolorized.
C.	-	Complies	Infrared absorption.
pH(10.0% w/v solution in water)	-	7.12	Between 6.8% - 7.4
Specific optical rotation (5.0%w/v solution in water)	°	+95.9°	Between +95° to 97 °(dried substance)
Fluorides	PPM	Complies	NMT 10 PPM
Arsenic	PPM	Complies	NMT 10 PPM
Loss on drying (at 105°C for 2hrs)	%	0.06%	NMT 0.1%
Assay by titration	%	99.82%	98.0 to 101.0%

Physical Properties

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

Shelf Life & Storage

- Shelf Life: 3 years from date of manufacture under recommended storage.

- Storage Conditions: Store in a cool, dry place at 15–25°C. Protect from light, heat, and moisture. Keep the container tightly closed in the original, properly labeled container and store in a well-ventilated area to maintain product quality and stability.

Applications

- Use: Widely used as a source of vitamin C and calcium in pharmaceutical, nutraceutical, and food formulations. It supports immune function, collagen synthesis, wound healing, antioxidant protection, and bone health. It is commonly used in tablets, capsules, powders, effervescent formulations, and fortified foods due to its buffered, non-acidic nature.

- Dosage: Depends on the intended formulation, vitamin C content, calcium content, patient age, and nutritional or clinical requirements. It should be used according to product formulation specifications 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.