

SPECIFICATION

Product Name: Calcium Hydrogen Phosphate Dihydrate BP/USP Grade
Chemical Formula: $\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$
CAS Number: 7789-77-7
Molecular Weight: 172.09 g/mol
Appearance: White or almost white, crystalline granules
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification A, B & C	-	Complies	-
Acid insoluble substances	%	0.074	Max 0.1
Carbonates	-	Complies	No effervescence with hcl should be produced
Chlorides	%	<0.125	Max 0.25
Fluorides	PPM	21	Max 50
Sulphates	%	<0.5	Max 0.5
Arsenic	PPM	<0.3	Max 3.0
Barium	-	Complies	No turbidity should be produced
Heavy metals (as Pb)	PPM	<40	Max 40
Iron	PPM	<400	Max 400

Loss on ignition (800°C to 825°)	%	25.94	24.5 – 26.5
Nitrate	-	Complies	To Pass Test
Reducing Substances	-	Complies	To Pass Test
Protenous Impurities	-	Complies	To Pass Test
Mono Calcium and Tri Calcium Phosphate	MI	11.6	11.0 – 12.5
Assay (Dihydrate)	%	100.71	98.0 - 105
Calcium Ca	%	29.6	28.9 – 30.0
Phosphorus	%	51.07	50.0 – 52.5
Particle size	Mesh	99.9 passing	Min 200
Microbiological Analysis (In House)			
Total Aerobic microbial count	cfu/gm	Complies	Max 1000
Total yeast and mold count	cfu/gm	Complies	Max 100
Escherichia Coli	Absent/g	Complies	Absent/g
Salmonella	Absent/g	Complies	Absent/g
Pathogens	Absent	Complies	Absent

Physical Properties

- Solubility: Slightly soluble in water. Insoluble in alcohol. Soluble in dilute mineral acids.

Shelf Life & Storage

- Shelf Life: 5 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a cool, dry, and well-ventilated area. Keep container tightly closed when not in use. Protect from moisture and humidity (product is hygroscopic to some extent).

Avoid exposure to direct sunlight and excessive heat. Recommended storage temperature: Below 30°C. Store away from strong acids and incompatible materials.

Applications

- Use: Diluent / filler in tablet and capsule formulations. Used in direct compression (DC) tablets. Used as a calcium and phosphorus supplement.
- Dosage: Dosage should always be determined by a qualified pharmacist, nutritionist, or healthcare professional based on formulation and regulatory guidelines.

Packaging

- Standard Packing: 25 kg woven PP bags with inner liner, 1Kgs and 100grams, 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.