

SPECIFICATION

Product Name: Di Calcium Phosphate Dihydrate Dental Grade/Micronized
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 fine Crystalline Powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Assay	%	100.5	Min 98.5
P ₂ O ₅	%	41.3	40.5 – 42.0
CaO	%	33.1	Min 32.0
Whiteness	%	>95.0	Min 95.0
Particle Size (325 Mesh)	%	>99.0	Min 99.0
Apparent Density	g/ml	0.88	0.8 -1.0
Water Absorption	ml/20g	5.53	5.0 – 6.0
Stability	-	Complies	Shall Pass
pH 20% w/v	%	7.35	7.0 – 8.1
Loss on Ignition	%	25.89	25.0 - 26.5

Loss on Drying	%	<0.60	Max 0.60
Heavy Metal as Pb	%	<0.002	Max 0.002
Fluoride	%	<0.005	Max 0.005
Chloride	%	<0.03	Max 0.03
Sulfate	-	Complies	Shall Pass
Arsenic	%	<0.0002	Max 0.0002
Iron	PPM	<50	Max 50
Insoluble in HCL	%	<0.2	Max 0.2
Total Bacterial Count	cfu/g	Complies	<100
Total Fungal Count	cfu/g	Complies	<10

Physical Properties

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

Shelf Life & Storage

- Shelf Life: 5 years from date of manufacture under recommended storage.
 - Storage Conditions: Store in a cool, dry and well-ventilated place. Keep container tightly closed to protect from moisture contamination. Protect from excess humidity and direct sunlight. Store at room temperature (below 30°C). Keep away from strong acids and incompatible materials.

Applications

- Use: Filler/diluent in pharmaceutical tablets. Used in certain dental and bone-related formulations.
 - Dosage: Depends on formulation design, abrasivity requirement, and regulatory standards.

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.

