

SPECIFICATION

Product Name: Di Calcium Phosphate Dihydrate DC Granules IP/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	-
Chlorides	%	<0.125	Max 0.25
Fluorides	PPM	21	Max 50
Sulphates	%	<0.5	Max 0.5
Arsenic	PPM	<3.0	Max 3.0
Barium	-	Complies	-
Heavy metals (as Pb)	PPM	<30	Max 30
Iron	PPM	<400	Max 400
Loss on ignition (800°C to 825°)	%	25.94	24.5 – 26.5
Assay	%	100.14	98.0 – 105.0

Microbiological Analysis (In House)			
Total Aerobic microbial count	Cfu/gm	Complies	1000
Total yeast and mold count	Cfu/gm	Complies	100
Escherichia Coli	Absent/g	Complies	Absent/g
Salmonella	Absent/g	Complies	Absent/g
Physical Analysis (In House)			
Particle size/Sieve analysis	0.5% Maxi Retained on 20# BSS (500 micron)		0.08
	60.0%Mini. Retained on 100#BSS (150 micron)		87.2
	90.0%Mini Retained on 200#BSS (75 micron)		98.1
	98.0% Mini Retained on 300# BSS (53 micron)		99.2
Bulk Density Loose	g/ml	0.84	0.70
Tapped	g/ml	0.94	0.85

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 place. Protect from moisture and humidity. Keep container tightly closed after opening. Store at room temperature (below 30°C). Keep away from strong acids and reactive substances.

Applications

- Use: High-speed tablet manufacturing. Used in antacid tablets.
 - Dosage: Depends on formulation type, target calcium level, and medical advice.

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.

