

SPECIFICATION

Product Name: Di Calcium Phosphate Dihydrate Food 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	<3.0	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	11.6 – 12.5
Assay (Dihydrate)	%	100.71	98.0 - 105
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
Pathogens	Absent	Complies	Absent
O V I (ORGANIC VOLATILE IMPURITES)	Meets the requirement	Complies	Meets
B S E / TSE	Absent	Complies	Absent

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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 (product is slightly hygroscopic). Keep away from direct sunlight and heat sources. Store at ambient temperature (below 30°C recommended). Keep bags tightly closed after opening.

Applications

- Use: Fortified foods and beverages. Used in spice mixes, milk powder, and seasoning blends. Used in bakery premixes and baking powders. Used as a tablet diluent and binder in nutraceutical and pharmaceutical tablets.

- Dosage: Depends on the application and regulatory limits in the country of use.

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.