

SPECIFICATION

Product Name: Calcium Hydrogen Phosphate Dihydrate EP 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 crystalline powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Assay	%	99.2%	97.0 - 103.0%
Calcium Content	%	24.3%	23.0 - 28.0%
Phosphate (PO ₄)	%	19.5%	18.5 - 21.0%
pH (10% solution)	-	7.1	6.5 - 7.5
Fluoride (F)	PPM	28 PPM	NMT 50 PPM
Loss on Drying	%	25.1%	24.5 - 26.5%
Heavy Metals (as Pb)	PPM	10 PPM	NMT 20 PPM
Arsenic (As)	PPM	1.2 PPM	NMT 2 PPM
Lead (Pb)	PPM	2.1 PPM	NMT 3 PPM
Mercury (Hg)	PPM	0.5 PPM	NMT 1 PPM
Cadmium (Cd)	PPM	0.6 PPM	NMT 1 PPM
Microbiological Analysis			
Total Aerobic Microbial Count (TAMC)	cfu/g	420 cfu/g	NMT 1000 cfu/g
Total Yeast & Mold Count (TYMC)	cfu/g	25 cfu/g	NMT 100 cfu/g
Escherichia coli	g	Absent	Absent in 1g
Salmonella spp.	g	Absent	Absent in 10g

Physical Properties

- Solubility: Practically Insoluble in water. Insoluble in ethanol. Insoluble in acetone. Insoluble in ether.

Shelf Life & Storage

- Shelf Life: 5 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a tightly closed container in a cool, dry, and well-ventilated place, protected from moisture, contamination, and excessive humidity.

Applications

- Use: Widely used in pharmaceutical, nutraceutical, food, and dietary supplement formulations. It serves as an important source of calcium and phosphorus and is commonly used as a pharmaceutical excipient.
- Dosage: Depends on Calcium and phosphorus requirements, Age and nutritional status, Product formulation, Intended application, Regulatory requirement.

Packaging

- Standard Packing: 25 kg woven pp bags 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.