

## SPECIFICATION

<b>Product Name:</b> Calcium Carbonate EP Grade
<b>Chemical Formula:</b> CaCO <sub>3</sub>
<b>CAS Number:</b> 471-34-1
<b>Molecular Weight:</b> 100.09 g/mol
<b>Appearance:</b> White or almost white powder
<b>Odor:</b> Odorless

## Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification (A) Carbonate Test (B) Calcium Test	-	Complies	Positive Reaction
Substances insoluble in acetic acid	%	0.05%	NMT 0.2%
Arsenic (As)	PPM	0.3 PPM	NMT 1 PPM
Barium	-	Complies	No opalescence
Iron (Fe)	PPM	35 PPM	NMT 200 PPM
Heavy Metals	PPM	3 PPM	NMT 20 PPM
Lead (Pb)	PPM	0.5 PPM	NMT 3 PPM
Magnesium and Alkali Metals	%	0.3%	NMT 1.0%
Chloride (Cl)	PPM	120 PPM	NMT 330 PPM
Fluoride (F)	PPM	10 PPM	NMT 50 PPM
Mercury (Hg)	PPM	0.1 PPM	NMT 0.5 PPM
Sulphate (SO <sub>4</sub> )	%	0.07%	NMT 0.25 PPM
Residual Solvents	-	Complies	As per EP
Loss on Drying	%	0.6%	NMT 0.2%
Assay (Dried Substance)	%	99.3%	98.0% - 100.5%

In-house Specification – pH (10% W/v aqueous dispersion)	-	9.2	8.0 - 10.0
In-house Specification - Bulk Density	g/ml	0.52 g/ml	NLT 0.40 g/ml

### **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 acidic environments.

### **Applications**

- Use: Widely used in pharmaceutical, nutraceutical, food, and dietary supplement formulations. It is one of the most concentrated and commonly used sources of elemental calcium.  
- Dosage: Depends on Age and nutritional requirements, Desired elemental calcium intake, Product formulation, Intended application, Regulatory requirements.

### **Packaging**

- Standard Packing: 25 kg HDPE 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.