

SPECIFICATION

Product Name: Chalk BP Grade (Calcium Carbonate)
Chemical Formula: CaCO ₃
CAS Number: 471-34-1
Molecular Weight: 100.09 g/mol
Appearance: White or almost white fine powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification	-	Complies	BP Test
Assay (as CaCO ₃ , dried basis)	%	99.4%	98.5% – 100.5%
Elemental Calcium	%	39.7%	NLT 39.0%
Loss on Drying	%	0.30%	NMT 2.0%
Acid Insoluble Substances	%	0.03%	NMT 0.2%
Magnesium & Alkali Salts	%	0.25%	NMT 1.0%
Chlorides	PPM	110 PPM	NMT 330 PPM
Sulphates	PPM	170 PPM	NMT 500 PPM
Iron	PPM	30 PPM	NMT 200 PPM
Heavy Metals	PPM	<10 PPM	NMT 20 PPM

Arsenic	PPM	<1 PPM	NMT 3 PPM
Lead	PPM	<1 PPM	NMT 3 PPM
Mercury	PPM	<0.1 PPM	NMT 1 PPM
Cadmium	PPM	<0.1 PPM	NMT 1 PPM
Particle Size	-	95% Passes 325 Mesh	As per customer requirement
Bulk Density	g/ml	0.80 g/ml	Informative
Tapped Density	g/ml	1.10 g/ml	Informative
pH (10% Suspension)	-	9.2	8.0 – 10.0
Microbiological Analysis			
Total Aerobic Plate Count	cfu/g	<100 cfu/g	<1000 cfu/g
Total yeast & Mould Count	cfu/g	<10 cfu/g	<100 cfu/g
Escherichia coli	Absent/g	Absent	Absent/g
Salmonella spp.	Absent/g	Absent	Absent/25 g
Staphylococcus aureus	Absent/g	Absent	Absent/g

Physical Properties

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

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 vapors.

Applications

- Use: Widely used as a source of calcium, antacid ingredient, and pharmaceutical excipient in pharmaceutical, nutraceutical, food, and dietary supplement formulations.

-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.

