

SPECIFICATION

Product Name: Calcium Carbonate Heavy IP/BP/USP Grade
Chemical Formula: CaCO ₃
CAS Number: 471-34-1
Molecular Weight: 100.09 g/mol
Appearance: A White or almost white powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification (A) Carbonate Test (B) Calcium Test	-	Complies	Must Comply with the test Must Comply with the test
Substances insoluble in acetic acid	%	0.1%	Max. 0.2%
Arsenic	PPM	2 PPM	Not more than 3 ppm
Barium	-	Complies	Must Comply with the test
Iron	%	0.01%	< 0.02 %
Heavy Metals	PPM	10 PPM	Not more than 20 ppm
Lead	PPM	2 PPM	Not more than 3 ppm
Magnesium and alkali Metals	%	1.0%	The residue weighs not more than 1.0%
Chloride	PPM	Complies	NMT 250 ppm

Fluoride	PPM	37 ppm	50 ppm
Mercury	PPM	Complies	0.5 ppm
Sulphate	%	Complies	NMT 0.3%
Residual Solvents	-	Complies	Meets the requirement
Loss on Drying	%	1.3%	Not more than 2.0%, Determined on 1.000 g
Assay (Dried Substance)	%	100.2%	98 % to 100.5%
In-house Specification – pH (10% W/v aqueous dispersion)	%	9.5	8.0 - 10.0
In-house specification - Bulk Density	g/ml	0.55 g/ml	Not less than 0.55 g/ml
Particle size	Mesh	Complies	100% passing through 100 mesh

Physical Properties

- Solubility: Practically insoluble in water, insoluble in alcohol. Readily soluble with effervescence in dilute acids.

Shelf Life & Storage

- Shelf Life: 5 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a well-closed container. Keep in a dry place (protect from moisture). Store at room temperature. Protect from contamination and dust. Keep away from strong acids.

Applications

- Use: Used as an antacid to relieve acidity and heartburn. Used as a diluent/filler in tablets and capsules. Widely used in calcium supplements. Functions as a binder and bulking agent in formulations.

- Dosage: Varies by application, especially in pharmaceutical and nutraceutical use.

Packaging

- Standard Packing: 25 kg woven PP bags with inner liner, 1 kgs and 100 grams, 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.