

SPECIFICATION

Product Name: Calcium Carbonate Food 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	-	Complies	Must Comply with the test
Heavy Metals	PPM	11 PPM	Not more than 20ppm
Lead	PPM	2 PPM	Not more than 3 ppm
Magnesium and alkali Metals	%	1.0%	The residue weighs not more than 1.0%
Fluoride	PPM	39 PPM	50 PPM

Mercury	PPM	Complies	0.5 PPM
Residual Solvents	-	Complies	Meets the requirement
Loss on Drying	%	1.5%	Not more than 2.0%, Determined on 1.000 g
Assay (Dried Substance)	%	101.4%	98 % to 100.5%
In-house Specification – pH (10% W/v aqueous dispersion)	%	9.3	8.0 - 10.0
In-house specification - Bulk Density	g/ml	0.55 g/ml	Not less than 0.55 g/ml

Physical Properties

- Solubility: Practically insoluble in water, insoluble in alcohol. Soluble in dilute 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. Keep container tightly closed to prevent moisture absorption and contamination. Protect from humidity and direct sunlight. Store away from acids, as it reacts with them. Use airtight packaging.

Applications

- Use: Widely used to enrich foods like dairy products, cereals, juices, and bakery items with calcium. Used in tablets and powders as a calcium source for bone health. Helps neutralize stomach acid in digestive formulations. Acts as a firming agent, stabilizer, and acidity regulator in various food products. Used in some foods to maintain whiteness and improve appearance. Adds volume in food and nutraceutical formulations.
 - Dosage: Depends on age, gender, health condition, and dietary intake.

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.

