

SPECIFICATION

Product Name: Calcium Carbonate Oyster Shell
Chemical Formula: CaCO ₃
CAS Number: 471-34-1
Molecular Weight: 100.09 g/mol
Appearance: A White, Fine, Microcrystalline Powder.
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification (A) Reaction A and B of Calcium Salt (B) Reaction A of Carbonates	-	Complies	(i) Reaction A of Calcium Salts: A White, Crystalline Precipitate should be formed (ii) A White Precipitate should be obtained that is only sparingly soluble in dilute acetic but is soluble in hydrochloric acid. A White precipitate should be formed that dissolves on addition of an excess of dilute hydrochloric acid
Substances insoluble in acetic acid	Mg	7 mg	The residue should weigh not more than 10 mg
Arsenic	PPM	3 PPM	Not more than 4 ppm
Heavy Metals	PPM	13 PPM	Not more than 20 ppm
Barium	-	Complies	The solution should remain clear for not less than 15 minutes

Iron	PPM	166 PPM	Not more than 200 ppm
Magnesium and alkali Metals	PPM	3 PPM	The residue weighs not more than 5 mg
Chloride	PPM	188 PPM	Not more than 250 ppm
Sulphates	%	0.1%	Not more than 0.3%
Loss on Drying (at 200°C)	%	1.5%w/w	Not more than 2.0%w/w
Assay (By Titrimetric)	%	100.4%	It should contain not less than 98.0% and not more than 100.5% of CaCO ₃ calculated on the dry's basis
Visible Foreign & Black Particles	-	Complies	The material should be free from visible foreign/ black particles
Particles Size	Mesh	Complies	Not less than 99.0% should pass through 100 mesh
Bulk Density	g/ml	0.89 g/ml	Tapped density: Not less than 0.80 g/mL
Total Aerobic microbial count	Cfu/g	Complies	1,000 Cfu/g
Total yeast and mold count	Cfu/g	Complies	100 Cfu/g
Escherichia Coli	Absent/g	Complies	Absent/g
Salmonella	Absent/g	Complies	Absent/ 10g
Pseudomonas Aeruginosa Salmonella	Absent/g	Complies	Absent/g
Staphylococcus aureus	Absent/g	Complies	Absent/g

Physical Properties

- Solubility: Practically insoluble in water and in ethanol (95%), slightly soluble in water containing carbon dioxide or any ammonium salt. It is soluble with 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 cool, dry place. Protect from moisture and humidity. Store at room temperature. Keep away from strong acids and acidic vapors.

Applications

- Use: Acts as an antacid for acidity and heartburn. Used as a calcium supplement. Used as a calcium fortifying agent. Used in dietary and fortified foods. Suitable for natural-source calcium formulations. Widely used in bone health supplements.
- Dosage: depends on the application, mainly as a calcium supplement or antacid.

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.