

SPECIFICATION

Product Name: Calcium Carbonate Oystershell DC Granules
Chemical Formula: CaCO ₃
CAS Number: 471-34-1
Molecular Weight: 100.09 g/mol
Appearance: White to off white Granules
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Identification	-	Complies	Positive for calcium
Assay	%	99.4%	98.0% - 100.5%
Elemental Calcium	%	39.8%	39.0 – 40.5%
Loss on drying	%	0.48%	NMT 2.0%
Acid insoluble substances	%	0.05%	NMT 0.2%
pH (10% Solution)	-	9.3	8.5 – 10.0
Bulk density	g/ml	0.82	0.70 – 0.95 g/ml
Tapped density	g/ml	0.97	0.85 – 1.10 g/ml
Particle size	-	Complies	As per DC grade specification
Heavy metals	PPM	Complies	NMT 20 PPM
Arsenic	PPM	Complies	NMT 3 PPM

Lead	PPM	Complies	NMT 3 PPM
Cadmium	PPM	Complies	NMT 1 PPM
Mercury	PPM	Complies	NMT 0.5 PPM
Microbial Limits	-	Complies	Complies with applicable specification

Physical Properties

- Solubility: Insoluble in water. Insoluble in ethanol. Soluble in dilute hydrochloric acid. Soluble in dilute acetic acid.

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 at 15–30°C. Protect from moisture, excessive humidity, and contamination. Keep the container tightly closed in the original, properly labeled container and store away from strong acids and incompatible materials. Protect from direct sunlight and excessive heat to maintain the granules' flowability, compressibility, and product quality.

Applications

- Use: Widely used in pharmaceutical and nutraceutical formulations as a calcium supplement and direct compression excipient. It provides a highly bioavailable source of calcium to support bone and teeth health, normal muscle function, and nerve transmission. Owing to its excellent flowability and compressibility, it is commonly used in the manufacture of tablets, chewable tablets, capsules, and calcium-fortified dietary supplements without the need for wet granulation. It also functions as a diluent (filler) in direct compression tablet formulations.
- Dosage: Depends on the intended formulation, patient age, dietary calcium requirements, and therapeutic indication.

Packaging

- Standard Packing: 25 Kgs HDPE bag 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.