

SPECIFICATION

Product Name: Calcium Chloride Dihydrate BP Grade
Chemical Formula: NaHCO_3
CAS Number: 144-55-8
Molecular Weight: 147.01 g/mol
Appearance: White or almost white crystalline powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Identification Test A Test B Test C	- - -	Complies Complies Complies	Solutions S gives reaction (a) of chlorides. It gives the reactions of calcium. It complies with the limits of the assay.
Appearance of solution	-	Complies	Solution S is clear and not more intensely coloured than reference solution Y ₆ .
Acidity or alkalinity	-	0.1 ml is required.	To 10 ml of freshly prepared solution S add 0.1 ml of phenolphthalein solution. If the solution is red, not more than 0.2 ml of 0.01 M hydrochloric acid is required to discharge the colour and if the solution is colourless, not more than 0.2 ml of 0.01 M sodium hydroxide is required to turn it red.
Aluminium	-	Complies	No turbidity or precipitate is formed.
Barium	-	Complies	As per BP.
Magnesium & Alkali metals	%	Complies	Max. 0.5%
Sulfates	PPM	Complies	Max. 300 PPM
Iron	PPM	Complies	Max. 10 PPM, determined on solution S.
Assay	%	99.46%	97.0% to 103.0%

Physical Properties

- Solubility: Soluble in water. Soluble in ethanol. Insoluble in acetone.

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 and humidity, as the material is highly hygroscopic and readily absorbs water from the air. Keep the container tightly closed in the original, properly labeled container and store away from strong acids and incompatible materials to maintain product quality and stability.

Applications

- Use: Widely used as a source of calcium in pharmaceutical formulations. It is commonly used in intravenous calcium preparations for the treatment and prevention of hypocalcemia, and in the management of certain conditions such as hyperkalemia, hypermagnesemia, and calcium channel blocker overdose under medical supervision.
- Dosage: Depends on the clinical indication, patient age, body weight, serum calcium concentration, and route of administration. It should only be used under the supervision of a qualified healthcare professional.

Packaging

- Standard Packing: 25 Kgs woven pp 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.