

SPECIFICATION

Product Name: Sodium Bicarbonate EP Grade
Chemical Formula: NaHCO ₃
CAS Number: 144-55-8
Molecular Weight: 84.01 g/mol
Appearance: White or almost white crystalline powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Identification A:	-	Pass test	To pass test
Identification B: Give reaction of carbonates and bicarbonate	-	Pass test	To pass test
Identification C: Give reaction of sodium salts	-	Pass test	To pass test
Appearance of Solution (5% Soln.)	-	Solution is clear and colourless	Solution is clear and colourless
Carbonate (pH of 5% Soln.)	-	8.30	NMT 8.60
Chlorides	PPM	110 PPM	Max. 150 PPM
Sulfates	PPM	85 PPM	Max. 150 PPM
Ammonium	PPM	15 PPM	Max. 20 PPM
Arsenic	PPM	Pass test	Max. 2 PPM
Calcium	PPM	Pass test	Max. 100 PPM
Iron	PPM	8 PPM	Max. 20 PPM
Assay	%	99.30%	99.0% - 101.0%

Physical Properties

- Solubility: Soluble in water. Insoluble 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 15–25°C. Keep the container tightly closed to protect from moisture and contamination. Store away from strong acids, excessive heat, and direct sunlight in the original, properly labeled container to maintain product quality and stability.

Applications

- Use: Widely used in pharmaceutical, nutraceutical, and food formulations as an antacid, buffering agent, pH adjuster, alkalizing agent, and effervescent component. It is commonly incorporated into effervescent tablets, powders, oral solutions, tablets, and capsules. In pharmaceutical applications, it is used to relieve excess stomach acidity, maintain pH, and support formulation stability. It is also used in food products as a leavening agent and acidity regulator.

- Dosage: Depends on the intended pharmaceutical or nutraceutical formulation and the approved therapeutic indication. It should be used according to pharmacopeial standards, product formulation requirements, or as directed by 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.