



TECHNICAL DATA SHEET

Product Name: Sodium Bicarbonate

Synonyms: Baking Soda, Sodium Hydrogen Carbonate

Chemical Formula: NaHCO_3

CAS Number: 144-55-8

Molecular Weight: 84.01 g/mol

Appearance: White crystalline powder or fine granules

1. Typical Specifications

Parameter	Food Grade	Feed Grade	Industrial Grade
Purity (as NaHCO_3 , dry basis)	$\geq 99.0\%$	$\geq 98.5\%$	$\geq 98.0\%$
pH (1% solution)	8.5 ± 0.2	8.4–8.6	8.3–8.6
Loss on Drying	$\leq 0.25\%$	$\leq 0.30\%$	$\leq 0.40\%$
Arsenic (As)	$\leq 1\text{ppm}$	$\leq 2\text{ppm}$	$\leq 5\text{ppm}$
Heavy Metals (as Pb)	$\leq 5\text{ppm}$	$\leq 10\text{ppm}$	$\leq 20\text{ppm}$
Chloride (as NaCl)	$\leq 0.4\%$	$\leq 0.5\%$	$\leq 0.6\%$
Ammonium (NH_4^+)	Absent	Absent	$\leq 0.03\%$
Appearance	White powder / granule		

2. Applications

➤ **Food Industry:**

Used as a **leavening agent** in baking, a pH buffer, and an ingredient in effervescent beverages.

➤ **Feed Additive:**

Balances acid-base in ruminants, improves digestion, and prevents acidosis in dairy cows.

➤ **Industrial Uses:**

Fire extinguishers
Textile dyeing

Detergent formulation
Water treatment
Electroplating
Cleaning agent

3. Packaging

25kg PP/PE bags
50kg woven bags
1000kg jumbo bags
Custom packaging available upon request

4. Storage & Shelf Life

Store in a dry, ventilated area
Keep sealed to avoid moisture and contamination
Shelf Life: 24 months under proper storage conditions

5. Safety & Regulatory Information

Classification: Non-hazardous, non-flammable
Transport: Not regulated as dangerous goods
SDS: Available on request
Compliant with FCC / E500 / GB1886.2 / EU / USP standards (depending on grade)