



Technical Data Sheet

Sodium Bicarbonate

Chemical Formula	: NaHCO ₃
Molecular Weight	: 84.01 g/mol
EC No.	: 205-633-8
CAS No.	: 144-55-8

General information:

Sodium bicarbonate, also known as baking soda or sodium hydrogen carbonate, is a chemical compound with the formula NaHCO₃. It is a salt composed of the sodium cation (Na⁺) and the bicarbonate anion (HCO₃⁻). Baking soda appears as white crystals but is often found in the form of a fine powder. It has a slightly salty, alkaline taste reminiscent of sodium carbonate.

Here are its various applications:

Culinary Uses:

- In baking, it acts as a leavening agent, causing dough or batter to rise when heated.
- It serves as an antacid for treating heartburn and stomach upset.

Household Cleaning:

- Due to its mild abrasiveness, baking soda is an excellent cleaning agent. It can remove grime and neutralize odors.

Personal Hygiene:

- Found in toothpaste and mouthwashes, it helps remove plaque and neutralize acids produced by bacteria.
- Some people even use it as a deodorant.

Agriculture:

- In farming, sodium bicarbonate acts as a pH regulator to maintain stable soil acidity.

Industrial Applications:

- Used in glass manufacturing, detergents, and water treatment processes.
- Its fire-extinguishing properties are utilized in certain types of fire extinguishers.

Specification:

Appearance	White crystalline solid
NaHCO ₃	99% min
Na ₂ CO ₃	0.5% max
Cl ⁻	250 mg/kg max
SO ₄ ⁻²	300 mg/kg max
Water insoluble	500 mg/kg max



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Lead (Pb)	0.1 ppm max
Arsenic (As)	0.1 ppm max
Mercury (Hg)	0.1 ppm max
Cadmium (Cd)	0.1 ppm ma
Iron _(total) (Fe)	10.0 ppm max
Solubility	9.55 at 20 °C (g/100 ml water)
pH	8,0-8.6 (1% solution)

Expiration date:

Expiration date from the date of manufacture is 2-3 years.

Transportation and Storage:

Sodium bicarbonate is not listed as a dangerous cargo.

When handling and transporting sodium bicarbonate, it's essential to consult the applicable Material Safety Data Sheet (MSDS) for specific guidance.

Proper storage conditions include keeping it in a cool, dry place away from direct sunlight.

Ensure that sodium bicarbonate is not exposed to pressure or vacuum conditions during transportation or storage.

Important:

For a better suitability of the product for your particular purpose, tests are recommended prior product use. You are advised to make your own determination as to safety, appropriate manner of handling, storage, use and disposal. All the information contained in this product technical sheet is offered for your consideration, investigation and verification. The data is presented in good faith and is believed to be reliable. You should not consider the descriptions, information, data or design as a part of our terms and conditions of sale. We expressly disclaim responsibility or liability for any loss, damage or expense arising out of reliance on the information provided herein.