

SODIUM BICARBONATE TECHNICAL

Chemical Formula	: NaHCO ₃
Structural Formula	: $\text{Na}-\text{O}-\overset{\text{O}}{\parallel}{\text{C}}-\text{O}-\text{H}$
Common Names	: Baking Soda, Sodium Hydrogen Carbonate, Sodium Acid Carbonate
CAS Registry Number	: 144 -55-8

Wet crude bicarbonate is wet calcined and dissolved to form slurry. Slurry is filtered and then polished in the sparkle type filtering equipments. The clear solution is then carbonated into carbonation tower to form Sodium Bicarbonate crystals, these are centrifuged, washed, dried and packed.

Applications

Sodium Bicarbonate Technical Grade is used in the manufacture of products where edible or medicinal use is not intended. It is used in gold and platinum plating, tanning industry, dyes and intermediates, detergents, treating wool and silk, fire extinguishers, ceramics, rubber and plastics, oil well drilling fluids, pest control and paper and pulp industries.

Manufacturing

Sodium Bicarbonate Technical is manufactured by Tata Chemicals Ltd. which has the following certifications:

- ISO 9001:2008
- ISO 14001:2004
- OHSAS 18001:2007

Physical & Chemical Properties

Sodium Bicarbonate Technical Grade is in the form of white to light brown minutely crystalline powder, free from visible contamination and other extraneous impurities. It is liable to lumping if exposed to dampness or subjected to too high a pressure. It begins to decompose slowly at 50°C, releasing carbon dioxide gas.

Specifications*

Characteristics	Units	TCL Assured Specifications
Molecular Weight		84
Total Alkalinity (as NaHCO ₃)	%, min	99.20
pH	max	8.8
Chlorides (as Cl)	%, max	0.06
Matter insoluble in water	%, max	0.10
Sulphates (as SO ₄)	%, max	0.07
Iron (as Fe)	%, max	0.004
Heavy metals (as Pb)	ppm, max	5
Arsenic (as As)	ppm, max	1.5
Copper (as Cu)	ppm, max	30

Traceability

Tata Chemicals Ltd. offers full product traceability with batch and lot no. labelling.

Packaging

Available in 50 kg HDPE/PP bags with lamination/liner.

Storage

Sodium Bicarbonate should be stored in a cool, dry place and far away from any source of heat. The bags should not be stacked more than 10 layers height. The storing place should be free of objectionable odours, as the product is extremely likely to pick up odours.

