

*Serving Society  
through Science*

# SODIUM BICARBONATE REFINED

Chemical Formula :  $\text{NaHCO}_3$   
 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 Refined Grade is used in the manufacture of speciality chemicals, oral care products, deodorizer, personal care products and is also used for vegetable cleaning applications. Sodium Bicarbonate Refined Grade is also used in blasting of metals and antiques and finds use in Uranium mining/industry and many other industries.

## Manufacturing

Sodium Bicarbonate Refined 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 Refined Grade is in the form of small opaque, monoclinic crystals or as a white minutely crystalline powder, free from dirt and other foreign matter. 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	IS:2124:2000 Specifications	TCL Assured Specifications
Molecular Weight			84
Total Alkalinity (as $\text{NaHCO}_3$ )	%, min	99.0	99.54
pH	max	8.8	8.4
Chlorides (as Cl)	%, max	0.06	0.06
Matter insoluble in water	%, max	0.10	0.05
Sulphates (as $\text{SO}_4$ )	%, max	0.07	0.05
Iron (as Fe)	%, max	0.004	0.004
Heavy metals (as Pb)	ppm, max	5	5
Arsenic (as As)	ppm, max	1.5	1.5
Copper (as Cu)	ppm, max	30	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.

## For sales and technical queries write to:

Manager – Business Development and CRM

TATA CHEMICALS LIMITED, Heritage - TCL House,  
 Gujarat Vidyapith Swimming Pool Road, Usmanpura,  
 Ahmedabad - 380 014. Ph. No.: - 02892 - 655530/31  
 E-mail: [crm.chemicals@tatachemicals.com](mailto:crm.chemicals@tatachemicals.com),  
 Website: [www.tatachemicals.com](http://www.tatachemicals.com)



Ph. No.: - 02892 - 655530/31  
 E-mail: [chemconnect@tatachemicals.com](mailto:chemconnect@tatachemicals.com)

## For local supplies and support please contact your local distributor:



\*As our processes and products continuously undergo change, the above specifications may change without notice.

