

## SODIUM BICARBONATE INDUSTRIAL GRADE

Revised  
March, 2009

<b>CHEMICAL NAME:</b>	Sodium Bicarbonate
<b>FORMULA:</b>	NaHCO <sub>3</sub>
<b>MOLECULAR WEIGHT:</b>	84.01
<b>CAS NAME:</b>	Carbonic acid monosodium salt
<b>CAS NUMBER:</b>	144-55-8
<b>DESCRIPTION:</b>	White, crystalline powder
<b>GRADE:</b>	Industrial Grade



<b>PROPERTIES:</b>	<b><u>SCREEN ANALYSIS:</u></b>	<b><u>Cumulative Percent Retained</u></b>		
		<b><u>U. S. Std. Sieve No.</u></b>	<b><u>Minimum</u></b>	<b><u>Maximum</u></b>
		+ 100	0	80
		+ 200	20	100
		+ 325	50	100

**BULK DENSITY:**    **poured** – Typical range: 65 to 75 lbs. / ft<sup>3</sup>

**THEORETICAL PROPERTIES:**    The following properties are provided for convenience and reference only. These properties are not normally tested in the commercial product and no representation is made relative to the commercial product.

<b>THERMAL DECOMPOSITION:</b>	Decomposes (without melting) into Na <sub>2</sub> CO <sub>3</sub> , H <sub>2</sub> O, and CO <sub>2</sub>
<b>ALKALI EQUIVALENT:</b>	1 lb. NaHCO <sub>3</sub> = 0.369 lb. Na <sub>2</sub> O
<b>CARBON DIOXIDE EQUIVALENT:</b>	1 lb. NaHCO <sub>3</sub> = 0.524 lb. CO <sub>2</sub>
<b>SPECIFIC GRAVITY:</b>	2.16 g / cm <sup>3</sup>
<b>SPECIFIC HEAT @ 25 °C:</b>	20.94 cal / deg mol
<b>SOLUBILITY IN WATER @ 60 °C:</b>	16.4 g / 100 g H <sub>2</sub> O
<b>SOLUBILITY IN OTHER SOLVENTS:</b>	Insoluble in alcohol
<b>HEAT OF FORMATION:</b>	- 227.25 K cal / mol
<b>HEAT OF SOLUTION:</b>	3.81 K cal / mol
<b>SODIUM (Na) :</b>	27.1 % Minimum
<b>TASTE:</b>	Slightly alkaline

**PACKAGING:**

Multi-wall Paper Bags: 50 lbs.  
Super sacks: 2000 lbs. and 2450 lbs.

**Color Code: BLUE**

**HANDLING:**

Information concerning the handling and use of this product is provided in a material data sheet (MSDS). This MSDS must be fully read and understood prior to any exposure, handling, or use of the product.

**APPLICATIONS:**    Chemical processing, cleaning compounds, dry fire extinguishers, flue gas desulfurization, leather tanning, oil well drilling fluids, paper manufacturing, swimming pool treatments, textiles, water and waste water treatment

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