



TECHNICAL INFORMATION

SODIUM BICARBONATE # 1 TFF FOOD GRADE

Revision Date: 03/16/2015

CHEMICAL NAME: Sodium Bicarbonate FORMULA: NaHCO ₃ MOLECULAR WEIGHT: 84.01 CAS NAME: Carbonic acid monosodium salt CAS NUMBER: 144-55-8 DESCRIPTION: White, crystalline powder GRADE: No. 1 TFF Food Grade (with Tricalcium phosphate added)	<p style="text-align: center;">SCREEN ANALYSIS: Cumulative Percent Retained</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>U. S. Std. Sieve No.</u></th> <th style="text-align: center;"><u>Minimum</u></th> <th style="text-align: center;"><u>Maximum</u></th> </tr> </thead> <tbody> <tr> <td>+ 100</td> <td style="text-align: center;">0</td> <td style="text-align: center;">2</td> </tr> <tr> <td>+ 200</td> <td style="text-align: center;">20</td> <td style="text-align: center;">50</td> </tr> <tr> <td>+ 325</td> <td style="text-align: center;">60</td> <td style="text-align: center;">100</td> </tr> </tbody> </table> <p style="text-align: center;">BULK DENSITY: poured Typical range: 60 to 75 lbs. / ft³</p>	<u>U. S. Std. Sieve No.</u>	<u>Minimum</u>	<u>Maximum</u>	+ 100	0	2	+ 200	20	50	+ 325	60	100
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MEETS THE FOLLOWING FOOD GRADE SPECIFICATIONS

	<u>United States Pharmacopoeia</u>	<u>Food Chemical Codex (FCC)</u>	<u>Other</u>
Assay	99.0% - 100.5%	99.0% - 100.5%	---
pH (3% solution)	---	---	7.8-8.5
Insolubles (Clarity)	Clear solution	Clear solution	---
Moisture	0.25% max	0.25% max	---
Ammonia	Passes USP test	Passes smell test	---
Arsenic	2 ppm max	---	---
Heavy Metals	5 ppm max	---	---
Lead	---	2 ppm max	---
Cadmium	---	---	1 ppm max
Copper	---	---	1 ppm max
Iron	---	---	2 ppm max
Limit of Sulfur	150 ppm max	---	---
Appearance	---	---	---
Normal Carbonate	Passes USP Test	---	---
Identification	Responds to Test	Responds to Test	---



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.

THERMAL DECOMPOSITION: Decomposes (without melting) into Na₂CO₃, H₂O, and CO₂
ALKALI EQUIVALENT: 1 lb. NaHCO₃ = 0.369 lb. Na₂O
CARBON DIOXIDE EQUIVALENT: 1 lb. NaHCO₃ = 0.524 lb. CO₂
SPECIFIC GRAVITY: 2.16 g / cm³
SPECIFIC HEAT @ 25 °C: 20.94 cal / deg mol
SOLUBILITY IN WATER @ 60 °C: 16.4 g / 100 g H₂O
SOLUBILITY IN OTHER SOLVENTS: Insoluble in alcohol
HEAT OF FORMATION: - 227.25 K cal / mol
HEAT OF SOLUTION: 3.81 K cal / mol
TASTE: Slightly alkaline

<p>PACKAGING:</p> <p>Multi-wall Paper Bags: 50 lbs. and 25 kg. Super sacks: 2000 lbs. and 2450 lbs.</p> <p>SHELF LIFE: 2 years from manufacturing date</p>	<p>HANDLING:</p> <p>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.</p>
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APPLICATIONS: Baking mixes, fire extinguishers, self-rising flour, sponge rubber and plastics

The information herein is believed to be reliable. However, no warranty, expressed or implied, is made as to the accuracy or completeness and none is made as to merchantability of the material or its fitness for any purpose. The manufacturer shall not be liable for consequential damages or for damage to persons or property resulting from its use. Nothing herein shall be construed as a recommendation for use in violation of any patent.