



TECHNICAL INFORMATION

Sodium Bicarbonate Food Grade #1 TFF

Revision Date: June 26, 2018

Chemical Name: Sodium Bicarbonate
Country Of Origin: United States
Origin: Nahcolite
Formula: NaHCO_3
Molecular Weight: 84.01
CAS Name & Number: Sodium Hydrogen Carbonate/144-55-8
E Number: 500(ii)
Description: White, Crystalline Powder
Grade: No. 1 (with Tricalcium phosphate added)

Screen Analysis

Cumulative Percent Retained

U. S. Std. Sieve No.	Minimum	Maximum
+100	0	2
+200	20	50
+325	60	100

Bulk Density

Poured Typical Range: 60 - 75 lbs / ft³
Tricalcium Phosphate Content: 0.20% - 0.50%

Meets The Following Food Grade Specifications

	United States Pharmacopoeia	Food Chemical Codex (FCC)	Other
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*	20 PPM Max	Passes Smell Test	---
Arsenic*	2 PPM Max	---	---
Heavy Metals*	---	---	5 PPM Max
Lead*	---	2 PPM Max	---
Cadmium*	---	---	1 PPM Max
Copper*	---	---	1 PPM Max
Calcium*	---	---	100 PPM Max
Iron*	---	---	2 PPM Max
Limit of Sulfur*	150 PPM Max	---	---
Normal Carbonate*	Passes USP Test	---	---
Identification*	Responds to Test	Responds to Test	---

*Tests done prior to Tricalcium phosphate added

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 Na_2CO_3 , H_2O , and CO_2

Alkali Equivalent: 1 lb. NaHCO_3 = 0.369 lb. Na_2O

Carbon Dioxide Equivalent: 1 lb. NaHCO_3 = 0.524 lb. CO_2

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 H_2O

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

Packaging:

Multi-wall Paper Bags: 25 kg, 50 lb

Super Sacks: 500 kg, 1000 kg, 2000 lb, 2450 lb

Bulk: Truck

Shelf Life:

2 years from manufacturing date.

Handling:

Information concerning the handling and use of this product is provided in a Safety Data Sheet (SDS).

This SDS must be fully read and understood prior to any exposure, handling, or use of the product.

It is the customer's responsibility to adhere to all handling, storage, and use guidelines.

Applications:

Most commonly used in food.



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NSF/ANSI 60

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