



KENCRO CHEMICALS

SPECIFICATION: SODIUM BICARBONATE

		SCREEN ANALYSIS		
		CUMULATIVE PERCENT RETAINED		
		US Std. Sieve No.	Minimum	Maximum
Chemical Formula	NaHCO ₃	+100	0	2
Chemical Name	Sodium Bicarbonate	+200	20	50
Molecular Weight	84.01	+325	60	100
Cas Number	144-55-8	BULK DENSITY: poured Typical range: 68 to 75 lbs./ft ³		
Cas Name	Carbonic acid monosodium salt			
Description	White, crystalline powder			
Grade	USP #1 Powder			

SPECIFICATIONS AND REQUIREMENTS

	<u>United States Pharmacopoeia</u>	<u>Food Chemical Codex (FCC)</u>
Assay (dry basis)	99.0% - 100.5%	99% min
Insoluble Substances	Meets USP test	Passes FCC test
Loss on drying	0.25% max	0.25% max
Ammonia	Meets USP test	Passes FCC test
Arsenic	2-ppm max	
Heavy Metals	5-ppm max	5-ppm (as Pb) max
Carbonates	Meets USP test	No FCC requirement
Chloride (as Cl)	150-ppm max	No FCC requirement
Limit of Sulfur Compound	150-ppm max	No FCC requirement
Identification	Responds to USP tests for Sodium and Bicarbonate	Responds in FCC tests for Sodium and Bicarbonate

THEORETICAL PROPERTIES:

THERMAL DECOMPOSITION:

ALKALI EQUIVALENT:

CARBON DIOXIDE EQUIVALENT:

SPECIFIC GRAVITY:

SPECIFIC HEAT @ 25c:

SOLUBILITY IN WATER @ 60c:

SOLUBILITY IN OTHER SOLVENTS:

HEAT OF FORMATION:

HEAT OF SOLUTION:

TASTE:

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

Decomposes (without melting) into Na₂CO₃H₂O, and CO₂

1 lb. NaHCO₃ = 0.369 lb. Na₂O

1 lb. NaHCO₃ = 0.524 lb. CO₂

2.16 g/cm³

20.94 cal/deg mol

16.4G/100G H₂O

Insoluble in alcohol

- 227.25 K cal/mol

3.81 K cal/mol

Slightly alkaline

PACKAGING:

Multi-wall Paper Bags: 50 lbs. & 25 kg.

Super sacks: 2000 lbs. & 2450 lbs.

Color Code: RED

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: Antibiotic manufacturing, cake, pancake, and ready-mixes, candies, catalyst manufacturing, chemicals, dentifrice, explosives, fire extinguishers, food colors, food conditioners, paper making, pharmaceuticals, photography, flour (self-rising), starches.