Specification Reference: SS/SB.001 Issue No: 12

Dated: 27SEP2021

Sales specification SODIUM BICARBONATE EP/USP GRADES



PRODUCT DESCRIPTION

Sodium Bicarbonate is a white or almost white crystalline powder of Pharmaceutical and Food Chemical Codex grade quality. It is available in a range of grades specified by their particle size.

IDENTIFICATION

Gives reactions characteristic of sodium salts and of bicarbonates. (A,B,C)

CHEMICAL COMPOSITION

			Limit		Typical
Sodium Bicarbonate Assay ¹	NaHCO ₃	%	99.0	MIN.	
			100.5	MAX.	99.70
Loss on Drying ¹	Wt. Loss	%	0.25	MAX.	0.01
Ammonium ¹	NH ₄	mg/kg	20	Max.	2
Arsenic ²	As	mg/kg	2	Max.	<0.1
Calcium ²	Ca	mg/kg	100	MAX.	70
Chloride ¹	Cl	mg/kg	150	MAX.	112
Mercury ²	Hg	Mg/kg	0.1	Max.	0.01
Lead ³	Pb	mg/kg	2	Max.	<0.1
Iron ²	Fe	mg/kg	20	Max.	0.9
Sulphate ³	SO ₄	mg/kg	150	Max.	53
Carbonates as determined by pH of a freshly prepared 5% Solution ²			8.6	Max.	7.97
Insoluble Substances ¹	luble Substances ¹		1 g. dissolves completely in 20ml. of water to give a clear and colourless solution		
Normal Carbonate ³			Passes test		

^{1.}Tested daily 2.Tested weekly 3. Tested monthly

PARTICLE SIZE

Grade		Sieve Fractions (microns)	*% Max. by weight	Average Median Size (microns)
Extra Fine	Retained on	250	0.2	40
	Retained on	125	2.0	
	Retained on	63	25.0	
Fine Granular	Retained on	212	1.0	105
	Retained on	125	28.5	
	Passing	75	15.0	
Medium	Retained on	250	5.0	140
Granular	Passing	63	15.0	
Coarse Granular	Retained on	250	5.0	180
	Passing	125	13.0	
Ultra Coarse Granular	Retained on	500	5.0	285
	Total passing	250	15.0 - 60.0	
	Passing	150	15.0	

^{*} Limits expressed as non-cumulative values

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