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# sales specification

## SODIUM BICARBONATE HAEMODIALYSIS GRADES

### PRODUCT DESCRIPTION

Sodium Bicarbonate of haemodialysis quality is available in three grades, Medium Granular, Coarse Granular and Ultra Coarse Granular, specified by their particle size and complying with the following EP/USP chemical composition.

### IDENTIFICATION

Gives reactions characteristic of sodium salts and of bicarbonates.

### CHEMICAL COMPOSITION

				<u>Limits</u>		<u>Typical</u>
Sodium Bicarbonate Assay <sup>1</sup>	NaHCO <sub>3</sub>	%	:	99.0 100.5	Min. Max.	99.90
Carbonate <sup>1</sup>	CO <sub>3</sub>	%	:	0.23	Max.	0.05
pH of a freshly prepared 5% solution <sup>2</sup>			:	8.6	Max.	8.01
Loss on Drying <sup>1</sup>	Wt. Loss	%	:	0.25	Max.	< 0.01
Chloride <sup>1</sup>	Cl	mg/kg	:	150	Max.	95
Sulphate/Limit of Sulphur Compounds <sup>2</sup>	SO <sub>4</sub>	mg/kg	:	150	Max.	18
Calcium <sup>2</sup>	Ca	mg/kg	:	100	Max.	68
Magnesium <sup>2</sup>	Mg	mg/kg	:	40	Max.	6
Arsenic <sup>2</sup>	As	mg/kg	:	2	Max.	<0.1
Iron <sup>2</sup>	Fe	mg/kg	:	5	Max.	1
Aluminium <sup>2</sup>	Al	mg/kg	:	2	Max.	0.14
Copper <sup>2</sup>	Cu	mg/kg	:	1	max	0.04
Ammonium <sup>1</sup>	NH <sub>4</sub>	mg/kg	:	20	Max.	2
Limit of Ammonia <sup>1</sup>				Passes test		Passes test
Limit of Organics <sup>2</sup>		mg/kg	:	100	Max.	36
Residual Solvents (USP)	Meets the requirements					
Insoluble Substances <sup>1</sup>	1 g dissolves completely in 20 ml of water to give a clear and colourless solution					
Normal Carbonate <sup>3</sup>	Passes test					

1. Tested daily 2. Tested weekly 3. Tested monthly

### PARTICLE SIZE

<u>Grade</u>		<u>Sieve Fraction</u> (microns)	<u>*%Max. by Weight</u>	<u>Average</u> <u>Median Size</u> (microns)
Medium Granular	Retained on	250	5.0	140
	Passing	63	15.0	
Coarse Granular	Retained on	250	5.0	180
	Passing	125	13.0	
Ultra Coarse Granular	Retained on	500	2.0	285
	Total Passing	250	15.0 – 60.0	
	Passing	150	15.0	

\* Limits expressed as non-cumulative values

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