



## TECHNICAL DATA SHEET

### Sodium Bicarbonate

## PHARMACEUTICAL GRADE-Course

#### CHEMICAL INFORMATION

- $\text{NaHCO}_3$
- Molecular weight: 84 g/mol
- Natrii hydrogenocarbonas
- (Sodium bicarbonate)
- N° CAS: 144-55-8
- N° EINECS: 205-633-8

#### ASPECT

White Crystalline powder

#### SOLUBILITY

Freely soluble in water, practically insoluble in ethanol 96%  
5% aqueous solution: pH < 8.3

#### IDENTIFICATION

- In compliance with European
- and British Pharmacopoeias and
- USP (latest editions in force)

CHEMICAL CHARACTERISTICS	Specification	EUR.ph BP	USP
Sodium Bicarbonate ( $\text{NaHCO}_3$ )	99.0-100.5	✓	✓
Sodium Carbonate ( $\text{Na}_2\text{CO}_3$ ) in %	≤1		
Carbonate ( $\text{CO}_3$ ) in %	pH ≤ 8.6	≤ 8.3	
Loss on drying ( $\text{H}_2\text{O}$ ) in %	≤ 0.25		✓
Chloride ( $\text{Cl}^-$ ) in mg/kg	≤ 150	✓	✓
Sulfate ( $\text{SO}_4^{2-}$ ) in mg/kg	≤ 150	✓	✓
Iron (Fe) in mg/kg	≤ 20	✓	≤ 5
Calcium (Ca) in mg/kg	≤ 100	✓	✓
Ammonium ( $\text{NH}_4^+$ ) in mg/kg	≤ 20	✓	✓
Magnesium (Mg) in mg/kg	-		≤ 40
Aluminum (Al) in mg/kg	-		≤ 2
Arsenic (As) in mg/kg	≤ 2	✓	✓
Heavy metals in mg/kg	≤ 5	✓	✓
Insoluble substances	Conform		✓
Copper (Cu) in mg/kg	-		
Limit of organics in %	≤ 0.01		✓
Physical CHARACTERISTICS	Specification		
Particle size ≥ 150 micron	Min 50%	-	-

There is no residual solvent as Nova pharmed chemia manufacturing process is free from solvent.  
Microbiological characteristics can be provided on demand. typical values are respectively ≤100 CFU/ml TAMC & ≤10 CFU/ml TYMC & ≤ 5EU/ml bacterial Endotoxins. Specification value is the most restrictive between USP, European, British Pharmacopoeia. Values in "USP" column apply for hemodialysis grade only.