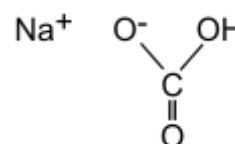


Sodium bicarbonate

Product Information

Chemical name :	Sodium bicarbonate , ACS grade	
	Syn.: sodium hydrogen carbonate ; Carbonic acid sodium salt; Carbonic acid monosodium salt; Natrium bicarbonicum; Natrium hydrogencarbonicum; Sodium hydrocarbonate	
Cat. Number :	70059A, 1Kg 70059B, 2.5Kg	
Structure :	NaHCO ₃	
Molecular Weight :	84.01	
CAS:	144-55-8	EC number: 205-633-8
Properties:	Form: white solid crystalline powder	
	Melting point: 50°C (323 K, 122°F) n	Density: 2.20 g/cm ³
	pKa: 10.329 and 6.351(carbonic acid)	Log P: -0.82
	Refractive index (nD)1.3355 ¹	
	Solubility : readily soluble in water >9% w/v, clear, colorless	



Storage: Room temperature (z)

Safety:  **Irritant** Causes serious eye irritation.
LD50: 4.22 g/kg

Risk Statements: 36/37/38
Safety Statements: 36/37/39

Applications: Suitable for many biochemistry and biotechnology applications.
Widely used to make buffers for purification, coating, chemical reactions, assays,...

Specifications

Test	Specification €70059A
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Purity	>97.7%
Ammonium (%)	0.02
Chloride (%)	0.003
Heavy Metals (as Pb)	0.0005
Iron (%)	0.002
Dnase (P/F)	0.001
Magnesium (%)	0.005%
Phosphates (%)	0.001%
Potassium (%)	0.005%
Sulfur compounds (%)	0.003%
Insolubles	0.015%

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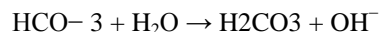
Contact your local distributor

uptima@interchim.com

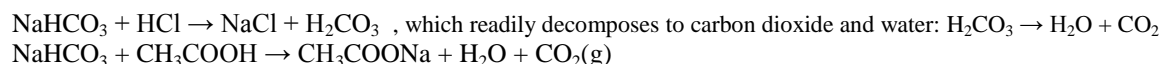
Technical information

●Chemical reactions

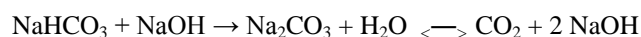
Sodium bicarbonate is an amphoteric compound, giving mildly alkaline aqueous solutions due to the formation of [carbonic acid](#) and [hydroxide](#) ion:



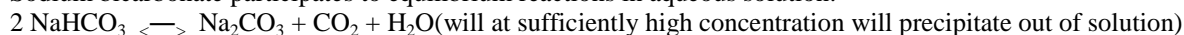
Reaction with an acid produce a salt and carbonic acid:



Reaction with bases such as sodium hydroxide form carbonates:



Sodium bicarbonate participates to equilibrium reactions in aqueous solution:



As a result, Sodium bicarbonate has a strong buffering effect. Its pKa is pKa: 10.329 and 6.351(carbonic acid)^[1]

● Solubility in water is high: 9 g/100 mL (increase with temperature from 69 g/L (0 °C) to 96 g/L (20 °C), 165 g/L (60 °C) and 236 g/L (100 °C)^[1]. It is soluble in acetone, but insoluble in ethanol

Ordering information

Catalog size quantities and prices may be found at <http://www.interchim.com>.

Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : Uptima / Interchim; Hotline : +33(0)4 70 03 73 06

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