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Product Information

Sodium bicarbonate Cell Culture Tested

Product Number **S 4019**
Store at Room Temperature

Product Description

Molecular Formula: NaHCO_3
Molecular Weight: 84.01
CAS Number: 144-55-8
 pK_a : 6.37, 10.25 (carbonic acid)
Synonyms: sodium hydrogen carbonate, sodium acid carbonate, baking soda

This Hybri-Max[®] product has been tested for suitability in hybridoma and cell culture research (2.2 mg/ml).

Sodium bicarbonate occurs in nature as the mineral nahcolite. It is used in the production of many sodium salts and as a source of carbon dioxide. Manufacturing applications of sodium bicarbonate include fire extinguishers and cleaning compounds.¹ Bicarbonate is an important agent of pH regulation *in vivo* and the intracellular transport of sodium bicarbonate has been widely investigated.^{2,3,4}

Sodium bicarbonate is used as a buffer in biochemistry, molecular biology, and chromatography. The use of sodium bicarbonate in cell culture media has been discussed.⁵ A review of methods of analysis for ochratoxin A from plasma and foods that includes the use of sodium bicarbonate has been published.⁶ A protocol has been reported on the separation of inorganic and organic arsenic species by HPLC in tandem with ICP mass spectrometry.⁷ The copper-mediated cleavage of histidine-containing peptides in sodium bicarbonate buffer has been studied.⁸

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product is soluble in water (100 mg/ml), yielding a clear, colorless solution. At 25 °C, the pH of a freshly prepared 0.1 M aqueous solution of sodium bicarbonate is 8.3.¹

References

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GCY/RXR 5/06

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