



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sia.com
sigma-aldrich.com

Product Information

Potassium bicarbonate ACS Reagent

Product Number **P 4913**
Store at Room Temperature

Product Description

Molecular Formula: KHCO_3

Molecular Weight: 100.1

CAS Number: 298-14-6

Synonyms: potassium hydrogen carbonate,
potassium acid carbonate¹

This product is designated as ACS Reagent grade and meets the specifications of the American Chemical Society (ACS) for reagent chemicals.

Potassium bicarbonate is a widely used reagent in research and industrial applications. It is used in crop fertilization and soil maintenance in agriculture, as a dry powder ingredient in fire extinguishers, and as a catalyst in synthetic fiber polymerization and olefin dehydrogenation.

Potassium bicarbonate has been used in studies of renal disorders and the relationship of muscle injury to this process.^{2,3,4} A study on the addition of potassium bicarbonate in conjunction with a lactose-emphasized diet in rats and its effect on short-chain fatty acid production has been reported.⁵

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.

References

1. The Merck Index, 12th ed., Entry# 7770.
2. Frassetto, L. A., et al., Comparative effects of potassium chloride and bicarbonate on thiazide-induced reduction in urinary calcium excretion. *Kidney Int.*, **58(2)**, 748-752 (2000).
3. Lindinger, M. I., et al., NaHCO_3 and KHCO_3 ingestion rapidly increases renal electrolyte excretion in humans. *J. Appl. Physiol.*, **88(2)**, 540-550 (2000).
4. Moore, K. P., et al., A causative role for redox cycling of myoglobin and its inhibition by alkalization in the pathogenesis and treatment of rhabdomyolysis-induced renal failure. *J. Biol. Chem.*, **273(48)**, 31731-31737 (1998).
5. de Groot, A. P., et al., Effects of a dietary load of acid or base on changes induced by lactose in rats. *Food Chem. Toxicol.*, **33(1)**, 1-14 (1995).

GCY/NSB 3/03

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