



>>Entry Name: Potassium hydrogen carbonate

ENTRY UNDER REVIEW

Synonym(s): Potassium bicarbonate, USAN. Potassium carbonate. Carbonic acid, monopotassium salt, 8CI

CAS Registry Number: 298-14-6

Related CAS Registry Numbers(s): 71-52-3

K[HCO₃]

Molecular Formula: CHKO₃

Molecular Weight: 100.115

Accurate Mass: 99.956277

Percentage Composition: C 12.00%; H 1.01%; K 39.05%; O 47.94%

Source/Synthesis: Synth. by bubbling CO₂ through an aq. soln. of K₂CO₃

Use/Importance: Commercially available. Coal gasification catalyst. Buffer in H₂O treatment and wine production. Constit. of effervescent pharmaceutical preps. Used for the treatment of potassium depletion and/or hypokalaemia

Physical Description: Colourless monoclinic cryst. Hygroscopic. Dec. on heating with H₂O and CO₂ loss

Solubility: V. sol. H₂O (60 g per 100 cm³ at 60°); insol. EtOH

Other Data: ΔH_f° -963 kJ mol⁻¹; ΔG_f° -864 kJ mol⁻¹; S° 116 J K⁻¹ mol⁻¹

Aldrich: 36103-8

Fluka: 60340

Sigma: P7682

References:

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