



>>Entry Name: Beryllium carbonate hydroxide ($\text{Be}_2(\text{CO})_3(\text{OH})_2$)

Synonym(s): $[\mu\text{-}[\text{Carbonato}(2\text{-})\text{-O:O'}]]\text{dihydroxydiberyllium}$, 9Cl. Basic beryllium carbonate

CAS Registry Number: 54685-97-1

$\text{Be}_2(\text{OH})_2\text{CO}_3$ or $\text{Be}(\text{OH})_2\cdot\text{BeCO}_3$

Molecular Formula: $\text{CH}_2\text{Be}_2\text{O}_5$

Molecular Weight: 112.048

Accurate Mass: 112.014589

Percentage Composition: C 10.72%; H 1.80%; Be 16.09%; O 71.40%

General Statement: All references to beryllium carbonate in the early literature prob. refer to basic beryllium carbonate

Source/Synthesis: Formed in reaction between aq. solns. of Be salts and Na_2CO_3 or NaHCO_3 . Alternatively produced by direct blending of aq. BeSO_4 with cryst. $[\text{NH}_4]\text{CO}_3$

Physical Description: Colourless powder. Dec. on heating to $\text{BeO}\cdot\text{BeCO}_3$ and then to BeO

Hazard & Toxicity: Highly toxic; suspected carcinogen

>>Derivative: 'Non-basic'

Synonym(s): Beryllium carbonate (BeCO_3)

CAS Registry Number: 13106-47-3

Molecular Formula: CBeO_3

Molecular Weight: 69.021

Accurate Mass: 68.996927

Percentage Composition: C 17.40%; Be 13.06%; O 69.54%

Other Data: See comment above

References:

Gupta, A.K.S., *J. Indian Chem. Soc.*, 1960, **37**, 473, (*synth*)

Ganopol'skii, V.I. *et al.*, *CA*, 1962, **56**, 1142d, (*synth*)

Kirk-Othmer Encycl. Chem. Technol., 2nd edn., Wiley, 1963, **3**, 474, (*rev, uses*)

Ross, S.D. *et al.*, *Spectrochim. Acta*, 1964, **20**, 781, (*ir*)

Swamy, M.S.R., *J. Therm. Anal.*, 1982, **25**, 355, (*thermal dec*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, BFP750