



>>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  $\text{Na}_2\text{CO}_3$  or  $\text{NaHCO}_3$ . Alternatively produced by direct blending of aq.  $\text{BeSO}_4$  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 ( $\text{BeCO}_3$ )

CAS Registry Number: 13106-47-3

Molecular Formula:  $\text{CBeO}_3$

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:

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

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