



>>Entry Name: **Zinc(II) citrate**

Synonym(s): 2-Hydroxy-1,2,3-propanetricarboxylic acid zinc salt (2:3)

CAS Registry Number: 546-46-3

Related CAS Registry Numbers(s): 25618-84-2 96030-90-9



Molecular Formula: C₁₂H₁₀O₁₄Zn₃

Molecular Weight: 574.373

Accurate Mass: 569.794495

Percentage Composition: C 25.09%; H 1.75%; O 39.00%; Zn 34.15%

Source/Synthesis: Synth. from ZnCO₃ and citric acid

Use/Importance: Antimicrobial agent. Used in breath fresheners; toothpastes; deodorants

Physical Description: Cryst. + 2 H₂O (H₂O)

Solubility: Sl. sol. H₂O (0.023 g per 100 cm³ at 40°); insol. CHCl₃, EtOH, Et₂O, Me₂CO

Other Data: Mono- and dihydrates have been reported

References:

Skorik, N.A. *et al.*, *Russ. J. Inorg. Chem. (Engl. Transl.)*, 1969, **14**, 52, (*synth, dihydrate*)

Maslowska, J., *J. Therm. Anal.*, 1984, **29**, 895, (*thermal anal*)

Srivastava, A. *et al.*, *Thermochim. Acta*, 1987, **117**, 201, (*thermal anal*)

Christie, G.L. *et al.*, *J. Inorg. Biochem.*, 1991, **42**, 273

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, ZFJ250