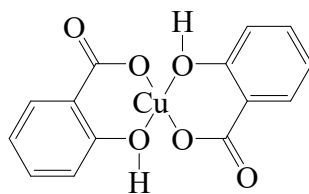




>>Entry Name: Bis(2-hydroxybenzoato-*O*¹,*O*²)copper

Synonym(s): Bis(salicylato)copper(II). Copper(II) salicylate



CAS Registry Number: 16048-96-7

Related CAS Registry Numbers(s): 133158-30-2

Molecular Formula: C₁₄H₁₀CuO₆

Molecular Weight: 337.775

Accurate Mass: 336.987338

Percentage Composition: C 49.78%; H 2.98%; Cu 18.81%; O 28.42%

General Statement: Different hydrates, and forms thereof, often confused in lit.

Source/Synthesis: Synth. by dehydrating tetrahydrate (blue form), then slow heating to give green form or rapid heating to give brown form

Physical Description: Green or brown solid

Other Data: $\mu_{\text{eff}} = 1.41\mu_{\text{B}}$ (green). $\mu_{\text{eff}} = 1.87\mu_{\text{B}}$ (brown)

>>Derivative: Dihydrate

CAS Registry Number: 109631-69-8

Source/Synthesis: Synth. from CuSO₄·5H₂O + Na salicylate in H₂O or aq. EtOH at pH 4-5

Other Data: Struct. has 5 coord. Cu

>>Derivative: Tetrahydrate

CAS Registry Number: 19025-98-0

Source/Synthesis: Synth. from CuSO₄·5H₂O + Na salicylate. Blue or green forms given

Physical Description: Blue needles or light green solid

Other Data: Blue form is [Cu(OOCC₆H₄OH)₂(H₂O)₂].2H₂O. $\mu_{\text{eff}} = 1.92\mu_{\text{B}}$ (blue). $\mu_{\text{eff}} = 1.45\mu_{\text{B}}$ (green)

References:

- Hanic, F. *et al.*, *Acta Cryst.*, 1960, **13**, 299-302, (*tetrahydrate*)
Inoue, M. *et al.*, *Acta Cryst.*, 1963, **16**, 699-700, (*anhydrous, tetrahydrate*)
Jagner, S. *et al.*, *Acta Cryst. B*, 1976, **32**, 548-554, (*dihydrate*)
Lajunen, L.H.J. *et al.*, *Thermochim. Acta*, 1984, **72**, 219-224, (*dihydrate*)
Kokkonen, P. *et al.*, *Thermochim. Acta*, 1987, **114**, 145-152, (*dihydrate*)
Melnik, M. *et al.*, *Polyhedron*, 1988, **7**, 1745-1749, (*dihydrate*)
Langfelderova, H. *et al.*, *J. Therm. Anal.*, 1990, **36**, 1009-1023, (*thermal anal*)