



>>Entry Name: Zinc(II) propanoate

Synonym(s): Zinc propionate

CAS Registry Number: 557-28-8

Related CAS Registry Numbers(s): 63745-19-7

$\text{Zn}(\text{OOCCH}_2\text{CH}_3)_2$

Molecular Formula: $\text{C}_6\text{H}_{10}\text{O}_4\text{Zn}$

Molecular Weight: 211.533

Accurate Mass: 209.987055

Percentage Composition: C 34.07%; H 4.76%; O 30.25%; Zn 30.91%

Use/Importance: Wood preservative; antifungal agent; waterproofing agent; polym. catalyst

Other Data: Thermal dec. to ZnO and $\text{Zn}_4\text{O}(\text{OOCCH}_2\text{CH}_3)_6$

>>Variant: Monoclinic-form

Molecular Formula: $\text{C}_6\text{H}_{10}\text{O}_4\text{Zn}$

Molecular Weight: 211.533

Accurate Mass: 209.987055

Percentage Composition: C 34.07%; H 4.76%; O 30.25%; Zn 30.91%

Source/Synthesis: Synth. from ZnCO_3 + propanoic acid in presence of propanoyl anhydride

Physical Description: Cryst.

>>Variant: Orthorhombic-form

Molecular Formula: $\text{C}_6\text{H}_{10}\text{O}_4\text{Zn}$

Molecular Weight: 211.533

Accurate Mass: 209.987055

Percentage Composition: C 34.07%; H 4.76%; O 30.25%; Zn 30.91%

Source/Synthesis: Synth. from $\text{Zn}(\text{OH})_2$ + aq. propanoic acid

Physical Description: Cryst.

References:

Goldschmied, E. *et al.*, *Acta Cryst. B*, 1977, **33**, 2117, (*synth, cryst struct, monoclinic form*)

Panevchik, V.V. *et al.*, *Russ. J. Inorg. Chem. (Engl. Transl.)*, 1981, **26**, 1373; 1982, **27**, 1241, (*thermal anal, powder struct*)

Basei, P.S. *et al.*, *Thermochim. Acta*, 1983, **71**, 15, (*thermal anal*)

Clegg, W. *et al.*, *Acta Cryst. C*, 1987, **43**, 456, (*cryst struct, orthorhombic form*)