>>**Entry Name: Zinc formate**

CAS Registry Number: 557-41-5
$Zn(OOCH)_2$

Molecular Formula: $C_2H_2O_4Zn$
Molecular Weight: 155.425
Accurate Mass: 153.924455
Percentage Composition: C 15.46%; H 1.30%; O 41.18%; Zn 42.07%
Use/Importance: Phenol-formaldehyde resin, trans-esterification and cross-linking catalyst. Used in paper coatings; pressure sensitive copying paper; wood preservative and in blowing agents
Physical Description: Cryst.
Other Data: Dec. to ZnO at >350°

>>**Derivative:** Dihydrate

CAS Registry Number: 5970-62-7
Molecular Formula: $C_2H_6O_6Zn$
Molecular Weight: 191.456
Accurate Mass: 189.945585
Percentage Composition: C 12.55%; H 3.16%; O 50.14%; Zn 34.15%
Physical Description: White monoclinic cryst.
Solubility: Sol. H_2O; insol. EtOH
Other Data: Loses $2H_2O$ at 140°. Isomorphous with Mg, Sr, Cd and Mn analogues

References:

Semenenko, K.N.*, Zh. Neorg. Khim.*, 1957, **2**, 2115, *(synth, dihydrate)*
Kirk-Othmer Encycl. Chem. Technol., 2nd edn., Wiley, 1963, **22**, 604
Filipov, I. *et al.*, *Croat. Chem. Acta*, 1970, **42**, 541, *(stability const)*
Burger, N. *et al.*, *Z. Kristallogr., Kristallgeom., Kristallphys., Kristallchem.*, 1975, **145**, 346, *(cryst struct, dihydrate)*
Baraldi, P.*, Spectrochim. Acta A*, 1979, **35**, 1003, *(ir, salt, dihydrate)*
Mu, J. *et al.*, *Thermochim. Acta*, 1981, **49**, 207, *(thermal anal, salt, dihydrate)*
Tewari, G.D. *et al.*, *Appl. Spectrosc.*, 1982, **36**, 441, *(ir, Raman, salt, dihydrate)*
Grigor'ev, A.I. *et al.*, *Russ. J. Inorg. Chem. (Engl. Transl.)*, 1985, **30**, 497, *(ir)*
Gorski, A. *et al.*, *J. Therm. Anal.*, 1987, **32**, 1243, *(thermal anal)*