



>>Entry Name: Zinc(II) tetrafluoroborate

Synonym(s): Bis(tetrafluoroborato)zinc

CAS Registry Number: 13826-88-5

$\text{Zn}(\text{BF}_4)_2$

Molecular Formula: $\text{B}_2\text{F}_8\text{Zn}$

Molecular Weight: 238.999

Accurate Mass: 237.934979

Percentage Composition: B 9.05%; F 63.59%; Zn 27.36%

Use/Importance: Catalyst for crease-proofing of cotton, for polym. of epoxides, for etherification of hydroxy compds.; cross-linking catalyst; reducing agent; flame-proofing agent; component of Zn/bromine batteries; used in antistatic layers for photographic films; used in soldering fluxes

Aldrich: 33386-7

>>Derivative: Hexahydrate

Synonym(s): Hexaaquazinc(2+) bis(tetrafluoroborate)

CAS Registry Number: 19585-06-9

Source/Synthesis: Obt. by dissoln. of ZnO or ZnCO_3 in aq. HBF_4 soln.

Physical Description: V. hygroscopic needles

Solubility: V. sol. H_2O , EtOH

Other Data: Dehydrates and dec. at $87\text{-}117^\circ$

References:

Funk, H. *et al.*, *Z. Anorg. Allg. Chem.*, 1926, **155**, 327, (*hexahydrate*)

Wilke-Dörfurst, E. *et al.*, *Z. Anorg. Allg. Chem.*, 1927, **159**, 197, (*synth, ammine solvate*)

Ostrovskaya, T.V. *et al.*, *Russ. J. Inorg. Chem. (Engl. Transl.)*, 1970, **15**, 338, (*synth, thermal anal, hexahydrate*)

Balicheva, T.G., *Mol. Fiz. Biofiz. Vodn. Sist.*, 1973, **1**, 88; *CA*, 1974, **80**, 150623, (*ir, hexahydrate*)

Gans, P. *et al.*, *J.C.S. Dalton*, 1976, 779, (*Raman*)

Kamienska, E. *et al.*, *Electrochim. Acta*, 1977, **22**, 181, (*conductivity*)

Libus, W. *et al.*, *J. Solution Chem.*, 1980, **9**, 355, (*conductivity*)