



>>Entry Name: Erbium(III) fluoride (ErF₃)

CAS Registry Number: 13760-83-3

ErF₃

Molecular Formula: ErF₃

Molecular Weight: 224.255

Accurate Mass: 222.925499

Percentage Composition: Er 74.58%; F 25.42%

General Statement: Isostructural with β-YF₃ below 1117°, and with α-YF₃ above this temp.

Source/Synthesis: Pptd. from soln. as hydrate

Physical Description: Rose-coloured cryst.

Melting Point: Mp 1146° (1140°)

Solubility: Insol. H₂O

Aldrich: 43215-6

References:

Zalkin, A. *et al.*, *J.A.C.S.*, 1953, **75**, 2453, (*cryst struct, synth*)

Thoma, R.E. *et al.*, *Inorg. Chem.*, 1966, **5**, 1937, (*struct*)

Peterson, J.R. *et al.*, *J. Inorg. Nucl. Chem.*, 1968, **30**, 1775, (*cryst struct*)

Haschke, J.M., *J. Solid State Chem.*, 1975, **12**, 115, (*synth*)

Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **1**, 254, (*synth*)

Gmelin Handbook Inorg. Chem., Syst. No. 39, Suppl., 1976, **C3**, 225, (*rev*)

Greis, O. *et al.*, *Handbook on the Physics and Chemistry of Rare Earths*, 1982, **5**, 387, (*rev*)

Mioduski, T. *et al.*, *Solubility Data Ser.*, 1985, **22**, 322

Greis, O. *et al.*, *Thermochim. Acta*, 1985, **87**, 145, (*dta*)

Uwamino, Y. *et al.*, *Bull. Chem. Soc. Jpn.*, 1986, **59**, 2263, (*pe*)