



>>Entry Name: Copper(II) fluoride (CuF₂)

Synonym(s): Cupric fluoride. Copper difluoride

CAS Registry Number: 7789-19-7

CuF₂

Molecular Formula: CuF₂

Molecular Weight: 101.543

Accurate Mass: 100.936404

Percentage Composition: Cu 62.58%; F 37.42%

General Statement: Has distorted rutile struct.

Use/Importance: Used in cathodes in non-aqueous cells. High temp. fluorinating agent

Physical Description: Monoclinic cryst; turns blue in moist air due to formation of dihydrate

Melting Point: Mp 785° (N₂ atm.)

Solubility: Sol. H₂O

Other Data: May be stored in sealed glass ampoules

Aldrich: 21790-5

Fluka: 61185

>>Derivative: Dihydrate

CAS Registry Number: 13454-88-1

Physical Description: Blue cryst.

Other Data: Dec. >130°. Hydrol. to CuF(OH) in hot H₂O

Fluka: 61187

References:

Jache, A.W. *et al.*, *J. Phys. Chem.*, 1952, **56**, 1106, (*synth, soly in HF*)

Haendler, H.M. *et al.*, *J.A.C.S.*, 1954, **76**, 2178, (*synth*)

Billy, C. *et al.*, *J.A.C.S.*, 1957, **79**, 1049, (*cryst struct*)

Ritter, R.L. *et al.*, *J. Phys. Chem.*, 1971, **71**, 2036, (*synth, kinetics*)

Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **1**, 246, (*synth*)

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