



>>Entry Name: Copper chloride (CuCl)

Synonym(s): Cuprous chloride

CAS Registry Number: 7758-89-6

Related CAS Registry Numbers(s): 14708-85-1

CuCl

Molecular Formula: ClCu

Molecular Weight: 98.999

Accurate Mass: 97.90845

Percentage Composition: Cl 35.81%; Cu 64.19%

General Statement: Has zinc blende struct. at r.t.

Source/Synthesis: Occurs in nature as the mineral *Nantokite*. Prepd. by reducing aq. CuCl₂ with Na₂SO₃ or metallic Cu

Use/Importance: Catalyst for diazo and diazonium chemistry; used with Grignard reagents

Physical Description: White cryst. Stable in dry air. Becomes green on exp. to moist air and brown on exp. to light. Undergoes a phase transition at 410°

Melting Point: Mp 430°

Boiling Point: Bp 1490°

Solubility: Spar. sol. H₂O; prac. insol. EtOH, Me₂CO

Hazard & Toxicity: Poison

Aldrich: 21294-6

Fluka: 61169

Sigma: C3294

References:

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Wagner, L.C. *et al.*, *Int. J. Mass Spectrom. Ion Phys.*, 1974, **15**, 255, (ms)

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Becker, K.D., *J. Chem. Phys.*, 1978, **68**, 3785, (nmr)

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