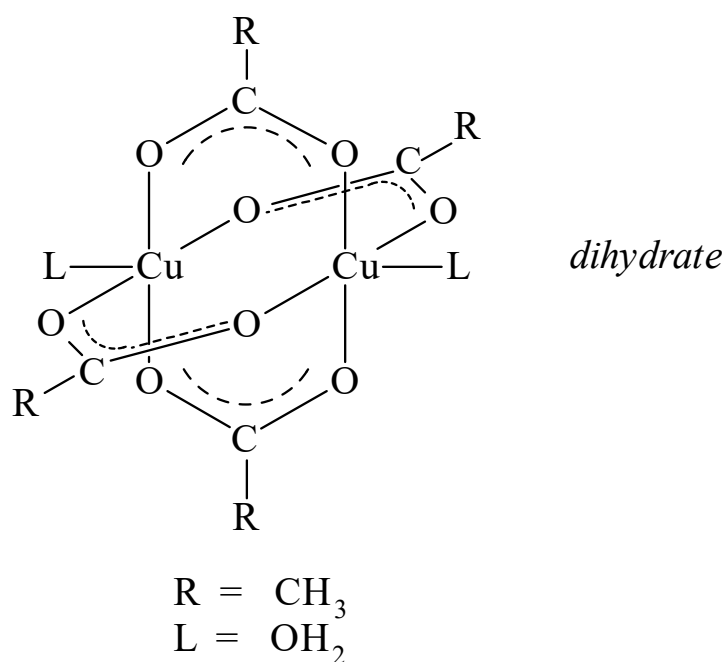




>>Entry Name: Tetrakis[μ-(acetato-*O*:*O'*)]dicopper

Synonym(s): Anhydrous cupric acetate



CAS Registry Number: 142-71-2

Related CAS Registry Numbers(s): 66923-66-8

Extra CAS Registry Numbers(s): 4180-12-5 23686-23-9

Molecular Formula:  $\text{C}_8\text{H}_{12}\text{Cu}_2\text{O}_8$

Molecular Weight: 363.27

Accurate Mass: 361.932416

Percentage Composition: C 26.45%; H 3.33%; Cu 34.99%; O 35.23%

**Use/Importance:** Commercially available. Fungicide, oxidises carbanions, radicals and hydrocarbons; used for oxidative coupling and solvolytic cleavage of Si-C, Bi-C, Pb-C and Sb-C bonds; rapid radical scavenger; catalyst for cyclopropanation of alkenes with diazo esters; Lewis acid catalyst; ageing of rubber, as pigment for ceramics, in textile dyeing.  $^{64}\text{Cu}$  compd. used as radioactive agent. (\*Cupric acetate Cu 64\*, USAN)

**Hazard & Toxicity:** LD<sub>50</sub> (rat, orl) 501 mg/kg. Exp. reprod. effects

Aldrich: 32675-5

Fluka: 61146

>>Derivative: Dihydrate

Synonym(s): Tetrakis[μ-(acetato-*O*:*O'*)]diaquadicopper, 11Cl. Cupric acetate monohydrate. Copper acetate dimer diaqua

CAS Registry Number: 15523-07-6

Extra CAS Registry Numbers(s): 6046-93-1 15523-07-6 155065-88-6

Molecular Formula:  $\text{C}_8\text{H}_{16}\text{Cu}_2\text{O}_{10}$

Molecular Weight: 399.3

Accurate Mass: 397.953546

Percentage Composition: C 24.06%; H 4.04%; Cu 31.83%; O 40.07%

**Use/Importance:** Synthetic intermed. for other Cu cluster complexes; catalyses phenol oxidn. to catechol when absorbed in mesoporous support

**Physical Description:** Green cryst.

**Melting Point:** Mp 115°

**Solubility:** Sol. H<sub>2</sub>O, EtOH; sl. sol. Et<sub>2</sub>O, sol. THF

**Other Data:** Dec. at 240°. Paramagnetic,  $\mu_{\text{eff}} = 1.40\mu_{\text{B}}$  (293K). Contains antiferromagnetic interactions between Cu atoms; Cu-Cu 261.6 pm

**Hazard & Toxicity:** LD<sub>50</sub> (rat, orl) 710 mg/kg

Aldrich: 22960-1

Fluka: 61148

Sigma: C5893