>>**Entry Name: Copper hydroxide ($Cu(OH)_2$)**
Synonym(s): Cupric hydroxide

CAS Registry Number: 20427-59-2

$Cu(OH)_2$

Molecular Formula: CuH_2O_2
Molecular Weight: 97.561
Accurate Mass: 96.945078
Percentage Composition: Cu 65.13%; H 2.07%; O 32.80%
Source/Synthesis: Synth. by addn. of NaOH to an ammoniacal soln. of a Cu^{II} salt. Stabilised form synth. by electrol. of a Cu anode in an electrolyte contg. Na_2SO_4 and Na_3PO_4
Use/Importance: Commercially available. Catalyst for the Ullmann condensation; mediates conversion of acid hydrazides to carboxylic acids. Used in stabilised form as a fungicide, in antifouling marine paints, in the cuprammonium process for rayon manuf. and as a nylon stabiliser
Biological Use/Importance: Fungicide, bactericide
Physical Description: Hygroscopic blue gel or powder
Solubility: Sol. acids, conc. alkali, NH_4OH, $(CH_2NH_2)_2$; insol. H_2O
Other Data: Dec. to CuO on warming
Hazard & Toxicity: LD_{50} (rat,orl) 489mg/kg

Aldrich: 28978-7

>>**Variant:** Mineral-form
Synonym(s): Spertiniite, 9Cl

CAS Registry Number: 79087-31-3
Molecular Formula: CuH_2O_2
Molecular Weight: 97.561
Accurate Mass: 96.945078
Percentage Composition: Cu 65.13%; H 2.07%; O 32.80%
Source/Synthesis: Occurs associated with chalocite in sites in Canada and the USSR
Physical Description: Blue to blue-green orthorhombic cryst.

References:

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