



>>Entry Name: Copper chloride hydroxide ($\text{Cu}_2\text{Cl}(\text{OH})_3$), 9Cl

CAS Registry Number: 1332-65-6

$\text{Cu}_2\text{Cl}(\text{OH})_3$

Molecular Formula: $\text{ClCu}_2\text{H}_3\text{O}_3$

Molecular Weight: 213.567

Accurate Mass: 211.856268

Percentage Composition: Cl 16.60%; Cu 59.51%; H 1.42%; O 22.47%

Source/Synthesis: Mineral

>>Variant: Mineral-form

Synonym(s): Botallackite, 9Cl

CAS Registry Number: 12015-74-6

Molecular Formula: $\text{ClCu}_2\text{H}_3\text{O}_3$

Molecular Weight: 213.567

Accurate Mass: 211.856268

Percentage Composition: Cl 16.60%; Cu 59.51%; H 1.42%; O 22.47%

General Statement: α -form

Source/Synthesis: Rare secondary mineral. Occurs associated with atacamite and paratacamite at the Botallack mine, St. Just, Cornwall, UK

Physical Description: Pale green monoclinic cryst.

>>Variant: Mineral-form

Synonym(s): Paratacamite, 9Cl

CAS Registry Number: 12186-00-4

Molecular Formula: $\text{ClCu}_2\text{H}_3\text{O}_3$

Molecular Weight: 213.567

Accurate Mass: 211.856268

Percentage Composition: Cl 16.60%; Cu 59.51%; H 1.42%; O 22.47%

General Statement: γ -form

Source/Synthesis: Secondary mineral. Widespread in the oxidn. zone of copper deposits

Physical Description: Green-rhombohedral cryst.

>>Variant: Mineral-form

Synonym(s): Atacamite, 9Cl

CAS Registry Number: 1306-85-0

Molecular Formula: $\text{ClCu}_2\text{H}_3\text{O}_3$

Molecular Weight: 213.567

Accurate Mass: 211.856268

Percentage Composition: Cl 16.60%; Cu 59.51%; H 1.42%; O 22.47%

General Statement: δ -form

Source/Synthesis: Secondary mineral. Widespread in the oxidn. zone of copper deposits

Physical Description: Light green orthorhombic cryst.

References:

Palache, C., *Dana's System of Mineralogy*, Wiley, 7th Edn., 1951, **2**, 69, (*mineralogy*)

Oswald, H.R. *et al.*, *Helv. Chim. Acta*, 1964, **47**, 272, (*synth*)

Fleet, M.E., *Acta Cryst. B*, 1975, **31**, 183, (*cryst struct, paratacamite*)

Hawthorne, F.C. *et al.*, *Mineral. Mag.*, 1985, **49**, 87, (*cryst struct, botallackite*)

Parise, J.B. *et al.*, *Acta Cryst. C*, 1986, **42**, 1277, (*cryst struct, atacamite*)

Pollard, A.M. *et al.*, *Mineral. Mag.*, 1989, **53**, 557, (*synth*)