

Calclacite

Ca(C₂H₃O₂)Cl•5H₂O

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Crystal Data: Monoclinic (synthetic). *Point Group:* 2/m. As silky hairlike efflorescences, to 4 cm.

Physical Properties: Hardness = n.d. D(meas.) = 1.5 D(calc.) = 1.55

Optical Properties: Semitransparent *Color:* White. *Luster:* Silky in aggregates.
Optical Class: Biaxial (+). *Orientation:* Z = c; OAP = {100}. $\alpha = 1.468$ $\beta = 1.484$
 $\gamma = 1.515$ $2V(\text{meas.}) = 80^\circ$

Cell Data: *Space Group:* P2₁/a (synthetic). $a = 11.51$ $b = 13.72$ $c = 6.82$ $\beta = 116.7^\circ$
Z = 4

X-ray Powder Pattern: Synthetic.

8.27 (s), 3.24 (s), 2.43 (s), 6.87 (m), 4.16 (m), 2.30 (m), 6.15 (w)

Chemistry:

	(1)	(2)
Ca	17.6	17.84
Cl	15.4	15.78
C ₂ H ₃ O ₂	25.5	26.28
H ₂ O	39.5	40.10
<u>Total</u>	<u>98.0</u>	<u>100.00</u>

(1) On a museum specimen of calcareous schist. (2) Ca(C₂H₃O₂)Cl•5H₂O.

Occurrence: Forms on calcareous rock and fossil specimens and pottery sherds through the action of acetic acid derived from oak storage cabinets.

Association: Unspecified efflorescent salts.

Distribution: Described only from museum specimens.

Name: From the composition, CALcium, chlorine, CL, and ACetate.

Type Material: Royal Institute of Natural Sciences, Brussels, Belgium, N5518.

References: (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 1107. (2) Van Tassel, R. (1958) On the crystallography of calclacite, Ca(CH₃COO)Cl•5H₂O. Acta Cryst., 11, 745–746.