

Crystal Data: Triclinic. *Point Group:* $\bar{1}$. As elongated crystals, tabular on {010}, with polygonal outline, to 0.5 mm; as crystalline spherulites.

Physical Properties: *Cleavage:* On {010}, good. *Fracture:* Uneven. *Tenacity:* Brittle. Hardness = n.d. D(meas.) = n.d. D(calc.) = 1.87

Optical Properties: Transparent. *Color:* Colorless. *Streak:* White. *Luster:* Vitreous. *Optical Class:* Biaxial (-). $\alpha = 1.483(3)$ (α') $\beta = [1.516]$ $\gamma = 1.533(3)$ (γ')
2V(meas.) = 70(2)°

Cell Data: *Space Group:* $P\bar{1}$. $a = 6.097(1)$ $b = 7.145(1)$ $c = 8.434(1)$ $\alpha = 76.54(1)^\circ$
 $\beta = 70.30(1)^\circ$ $\gamma = 70.75(1)^\circ$ $Z = 2$

X-ray Powder Pattern: Cerchiara mine, Italy.
5.52 (vs), 2.834 (s), 7.92 (m), 5.26 (m), 4.99 (m), 3.643 (m), 2.758 (m)

| Chemistry: | (1) | (2) |
|-------------------------------|---------|--------|
| C ₂ O ₃ | [39.54] | 39.54 |
| CaO | 30.03 | 30.79 |
| H ₂ O | [29.67] | 29.67 |
| Total | [99.24] | 100.00 |

(1) Cerchiara mine, Italy; by electron microprobe, average of five analyses, C₂O₃ and H₂O calculated from the ideal formula; corresponds to Ca_{0.98}C_{2.01}O₄·3.01H₂O (2) CaC₂O₄·3H₂O.

Occurrence: In veinlets cutting metamorphosed Mn–Ba-rich cherts in an obducted ophiolite.

Association: Quartz, barite, manganese oxides.

Distribution: From the Cerchiara mine, near Faggiona, Val di Vara, Liguria, Italy.

Name: An acronym with two meanings, for the essential chemical components, CAlcium and OXalate, or the Centennial Anniversary Of X-rays, an essential analytical tool in modern mineralogy.

Type Material: University of Genoa, Genoa, Italy.

References: (1) Basso, R., G. Lucchetti, L. Zefiro, and A. Palenzona (1997) Caoxite, Ca(H₂O)₃(C₂O₄), a new mineral from the Cerchiara mine, northern Appennines, Italy. Neues Jahrb. Mineral., Monatsh., 84–96. (2) (1998) Amer. Mineral., 83, 185 (abs. ref. 1).