Clinocervantite

$\text{Sb}^{3+}\text{Sb}^{5+}\text{O}_4$

**Crystal Data:** Monoclinic. *Point Group: 2/m.* As aggregates of prismatic crystals, elongated along [001], to 0.2 mm. *Twinning:* Multiple, with twin and composition plane \{100\}.


**Optical Properties:** Transparent. Color: Colorless. Streak: White. Luster: Vitreous. Optical Class: Biaxial. $\alpha = 1.72$ $\beta = \text{n.d.}$ $\gamma = 2.10$

**Cell Data:** Space Group: C2/c. $a = 12.061(1)$ $b = 4.836(1)$ $c = 5.383(1)$ $\beta = 104.60(4)^\circ$ Z = 4

**X-ray Powder Pattern:** Cetine mine, Siena, Italy. 3.244 (100), 2.877 (68), 2.920 (33), 2.640 (23), 1.861 (21), 1.783 (21), 1.812 (20)

**Chemistry:**

\[
\begin{align*}
\text{Sb} & \quad (1) \\
& \quad 99.19 \text{ wt. %}
\end{align*}
\]

(1) Cetine mine, Siena, Italy; average electron microprobe analysis; corresponds to $\text{Sb}_{2.00}\text{O}_4$.

**Occurrence:** In vugs in waste rock from an antimony mine.

**Association:** Valentinite, tripuhyte, bindheimite, rosiaite.

**Distribution:** From the Cetine mine, Siena, Italy.

**Name:** The prefix, *clino*, indicates the monoclinic analog of *cervantite*.

**Type Material:** Department of Earth Science, University of Genoa, Italy.

**References:** (1) Basso, R., G. Lucchetti, L. Zefiro, and A. Palenzona (1999) Clinocervantite, $\beta\text{-Sb}_2\text{O}_4$, the natural monoclinic polymorph of cervantite from the Cetine mine, Siena, Italy. Eur. J. Mineral., 11, 95-100.