

**Crystal Data:** Monoclinic. *Point Group:*  $2/m$ . As striated [100] acicular crystals to 4 mm.  
*Twinning:* Polysynthetic twins parallel elongation.

**Physical Properties:** *Cleavage:* Poor perpendicular to elongation. *Fracture:* Conchoidal.  
*Tenacity:* Brittle.  
Hardness = 3-4 VHN = 196 (25 g load). D(meas.) = n.d. D(calc.) = 5.747

**Optical Properties:** Opaque. *Color:* Black, white in reflected light. *Streak:* Black.  
*Luster:* Metallic. *Pleochroism:* Weak, grayish white to white. *Anisotropism:* Distinct, gray to dark gray (with brownish and greenish tint).  
*Optical Class:* n.d.  
 $R_1$ - $R_2$ : (470) 35.1-40.8 (19.4-22.2)<sub>oil</sub>, (586) 33.5-39.3 (19.3-21.7)<sub>oil</sub>, (586) 32.7-38.2 (18.7-21.1)<sub>oil</sub>, (650) 31.4-36.5 (17.3-19.5)<sub>oil</sub>

**Cell Data:** *Space Group:*  $P2_1/c$ . (pseudo-orthorhombic)  $a = 8.3965(5)$   $b = 27.9540(4)$   
 $c = 43.8840(13)$   $\beta = 90.061(12)^\circ$   $Z = 4$

**X-ray Powder Pattern:** Pollone deposit, near Pietrasanta, Apuan Alps, Tuscany, Italy.  
3.62 (100), 3.35 (95), 2.945 (85), 2.885 (80), 3.23 (65), 3.42 (45), 3.01 (45)

|                   |              |
|-------------------|--------------|
| <b>Chemistry:</b> | (1)          |
| Cu                | 0.09         |
| Ag                | 4.36         |
| Hg                | 0.15         |
| Pb                | 47.00        |
| Sb                | 19.57        |
| As                | 7.73         |
| <u>S</u>          | <u>20.56</u> |
| Total             | 99.46        |

(1) Pollone deposit, near Pietrasanta, Apuan Alps, Tuscany, Italy; average of 32 electron microprobe analyses, corresponding to  $\text{Cu}_{0.13}\text{Ag}_{3.65}\text{Hg}_{0.07}\text{Pb}_{20.41}(\text{Sb}_{14.49}\text{As}_{9.25})_{\Sigma=23.74}\text{S}_{57.72}$ .

**Occurrence:** In vugs within hydrothermal barite-quartz veins embedded in barite-pyrite lenses in complexly sheared and metamorphosed sedimentary rocks.

**Association:** Acanthite, famatinite, geocronite-jordanite, pyrargyrite-prustite, Sb-rich rathite, sphalerite (overgrowth on sterryite), tetrahedrite, xanthoconite.

**Distribution:** Pollone deposit, Valdicastello Carducci, near Pietrasanta, Apuan Alps, Tuscany, Italy.

**Name:** For the similarity to *sterryite* with the Greek prefix *para* meaning “near”.

**Type Material:** Natural History Museum, University of Pisa, Italy (19347), and at the Mineralogy Museum, School of Mines, Paris, France (82522).

**References:** (1) Moëlo, Y., P. Orlandi, C. Guillot-Deudon, C. Biagioni, W. Paar, and M. Evain (2011) Lead-antimony sulfosalts from Tuscany (Italy). XI. The new mineral species parasterryite,  $\text{Ag}_4\text{Pb}_{20}(\text{Sb}_{14.5}\text{As}_{9.5})_{\Sigma=24}\text{S}_{58}$ , and associated sterryite,  $\text{Cu}(\text{Ag,Cu})_3\text{Pb}_{19}(\text{Sb,As})_{22}(\text{As-As})\text{S}_{56}$ , from the Pollone mine, Tuscany, Italy. *Canadian Mineralogist*, 49, 623-638. (2) Moëlo, Y., C. Guillot-Deudon, M. Evain, P. Orlandi, and C. Biagioni (2012) Comparative modular analysis of two complex sulfosalts structures: sterryite,  $\text{Cu}(\text{Ag,Cu})_3\text{Pb}_{19}(\text{Sb,As})_{22}(\text{As-As})\text{S}_{56}$ , and parasterryite,  $\text{Ag}_4\text{Pb}_{20}(\text{Sb,As})_{24}\text{S}_{58}$ . *Acta Crystallographica Section B*, 68, 480-492. (3) (2014) *Amer. Mineral.*, 99, 872-873 (abs. refs. 1 and 2).