

**Crystal Data:** Monoclinic. *Point Group:* 2. As prisms of complex morphology to 0.5 mm.

**Physical Properties:** *Cleavage:* None. *Tenacity:* Brittle. *Fracture:* Conchoidal.  
Hardness = 3-3.5 VHN = 185-211 200 average (50 g load). D(meas.) = n.d. D(calc.) = 5.77

**Optical Properties:** Opaque. *Color:* Grayish black; white in reflected light. *Streak:* Black.  
*Luster:* Metallic. *Anisotropism:* Moderate in brown-violet and deep gray tints.  
*Birefractance:* Moderate. *Pleochroism:* None.  
*Optical Class:* n.d.

R<sub>1</sub>-R<sub>2</sub>: (400) 33.1-49.2, (420) 31.3-44.0, (440) 30.7-43.2, (460) 30.3-42.9, (470) 30.2-42.4,  
(480) 30.1-42.1, (500) 29.6-41.6, (520) 29.2-41.4, (540) 29.0-41.0, (546) 28.8-41.0, (560) 28.6-40.9,  
(580) 28.1-40.1, (589) 27.9-39.8, (600) 27.6-39.4, (620) 27.1-38.7, (640) 26.3-37.9, (650) 26.0-37.4,  
(660) 25.7-36.9, (680) 25.1-35.8, (700) 24.5-35.1

**Cell Data:** *Space Group:* P2<sub>1</sub>. a = 8.413(2) b = 25.901(5) c = 23.818(5) β = 90.01(3)° Z = 1

**X-ray Powder Pattern:** Calculated pattern.

3.795 (100), 3.020 (87), 2.9220 (82), 2.3752 (79), 2.738 (73), 3.238 (69), 2.1033 (64)

Chemistry:	(1)	(2)
Ag	0.71	0.59
Pb	52.05	52.27
Sb	15.40	15.36
As	10.61	10.68
S	21.16	21.10
Total	99.92	100.00

(1) Pollone mine, Valdicastello Carducci, Apuan Alps, Tuscany, Italy; average of 15 electron microprobe analyses; corresponds to Ag<sub>1.20</sub>Pb<sub>45.76</sub>As<sub>25.79</sub>Sb<sub>23.04</sub>S<sub>120.21</sub>. (2) AgPb<sub>46</sub>As<sub>26</sub>Sb<sub>23</sub>S<sub>120</sub>.

**Polymorphism & Series:** N = 4 member of the sartorite homologous series.

**Occurrence:** In a hydrothermal vein barite-pyrite-(Pb-Zn-Ag) deposit.

**Association:** Barite.

**Distribution:** From the Pizzone level, Pollone mine, Valdicastello Carducci, near Pietrasanta, Apuan Alps, Tuscany, Italy.

**Name:** For the *Pollone* mine, where the mineral was discovered.

**Type Material:** Natural History Museum, Vienna, Austria (N 9786).

**References:** (1) Topa, D., F.N. Keutsch, E. Makovicky, U. Kolitsch, and W. Paar (2017) Polloneite, a new complex Pb(-Ag)-As-Sb sulfosalt from the Pollone mine, Apuan Alps, Tuscany, Italy. *Mineral. Mag.*, 81(6), 1303-1322. (2) (2018) *Amer. Mineral.*, 103, 828-830 (abs. ref.).