

Crystal Data: Triclinic. *Point Group:* $\bar{1}$. As elongated crystals, to 0.15 mm.

Physical Properties: *Cleavage:* None. *Fracture:* Uneven. *Tenacity:* Brittle.
Hardness = 2.5-3 VHN = 50-55 (10 g load). D(meas.) = n.d. D(calc.) = 5.649

Optical Properties: Opaque. *Color:* Black, dark gray in reflected light. *Streak:* Dark brown-red.
Luster: Metallic. *Pleochroism:* Weak, light gray to greenish gray. *Anisotropism:* Weak, grayish to light blue.

Optical Class: n.d.

R₁-R₂: (471.1) 30.6-31.8, (548.3) 28.1-29.3, (586.6) 27.1-28.0, (652.3) 25.8-26.9

Cell Data: *Space Group:* $P\bar{1}$. $a = 8.920(1)$ $b = 9.429(1)$ $c = 20.062(3)$ $\alpha = 79.66(1)^\circ$
 $\beta = 88.84(1)^\circ$ $\gamma = 62.72(1)^\circ$ $Z = 2$

X-ray Powder Pattern: Lengenbach quarry, Binn Valley, Valais, Switzerland.
3.580 (100), 3.001 (98), 3.281 (73), 3.506 (58), 2.591 (57), 3.017 (54), 2.657 (51)

Chemistry:	(1)	(2)
Tl	39.55	40.79
Ag	18.42	17.22
Cu	0.06	
As	17.08	17.94
Sb	5.61	4.86
S	19.15	19.19
Total	99.87	100.00

(1) Lengenbach quarry, Binn Valley, Valais, Switzerland; average of 9 electron microprobe analyses; corresponding to Tl_{4.85}Ag_{4.28}Cu_{0.02}As_{5.72}Sb_{1.16}S_{1.00}. (2) Tl₅Ag₄As₆SbS₁₅.

Occurrence: In cavities in saccharoidal dolomitic marble.

Association: Hatchite/wallisite, smithite, realgar, trechmannite, edenharterite, jentschite.

Distribution: From zone 1 of the Lengenbach quarry, Binn Valley, Valais, Switzerland.

Name: Honors Dr. Thomas Raber (b. 1966), an expert on Lengenbach minerals.

Type Material: Mineralogy Museum, Department of Geosciences, University of Padova, Italy (MMP M11420).

References: (1) Bindi, L., F. Nestola, A. Guastoni, L. Peruzzo, M. Ecker, and R. Carampin (2012) Raberite, Tl₅Ag₄As₆SbS₁₅, a new Tl-bearing sulfosalt from Lengenbach quarry, Binn valley, Switzerland: description and crystal structure. *Mineral. Mag.*, 76(5), 1153-1163. (2) (2015) *Amer. Mineral.*, 100, 1652-1653 (abs. ref. 1).