

Crystal Data: Monoclinic. *Point Group:* 2/*m*. As thin plates, which may be aggregated into radial or spherical forms, less than 1 mm.

Physical Properties: Hardness = ~2 VHN = 38 D(meas.) = n.d. D(calc.) = 4.39

Optical Properties: Translucent. *Color:* Copper-red; in polished section, pure white, inclining to cream colored compared to galena, with strong bright red internal reflections.

Anisotropism: Very strong.

R₁–R₂: n.d.

Cell Data: *Space Group:* P2₁/*n*. *a* = 8.755(5) *b* = 24.425(15) *c* = 5.739(3)
β = 108.28(5)° *Z* = 2

X-ray Powder Pattern: Binntal, Switzerland.

2.675 (100), 2.88 (90), 3.96 (70), 3.67 (65), 4.10 (40), 3.58 (40), 3.18 (40)

Chemistry:

	(1)	(2)
Tl	33.6	38.22
Cu	1.67	
As	30.2	35.80
S	33.7	25.98
Total	99.17	100.00

(1) Binntal, Switzerland; by electron microprobe. (2) Tl₆As_{15.33}S₂₆ as determined by crystal structure analysis.

Occurrence: Of hydrothermal origin.

Association: Realgar, lead sulfantimonides.

Distribution: From the Lengenbach quarry, Binntal, Valais, Switzerland [TL].

Name: To honor Josef Imhof (1902–1969), professional mineral collector of Binn, Switzerland.

Type Material: Mineralogical-Petrographical Institute, University of Bern, Bern, Switzerland, L3491-64.

References: (1) Burri, G., F. Graeser, F. Marumo, and W. Nowacki (1965) Imhofit, ein neues Thallium–Arsenosulfosalz aus dem Lengenbach (Binntal, Kanton Wallis). *Chimia* (Switzerland), 19, 499–500 (in German). (2) (1966) *Amer. Mineral.*, 51, 531–532 (abs. ref. 1). (3) Nowacki, W. (1967) Über neue Mineralien aus dem Lengenbach. *Jahrb. Naturhist. Mus. Bern*, 1963–1965, 293–299 (in German). (4) (1969) *Amer. Mineral.*, 54, 1498 (abs. ref. 3). (5) Divjaković, V. and W. Nowacki (1976) Die Kristallstruktur von Imhofit, Tl_{5.6}As₁₅S_{25.3}. *Zeits. Krist.*, 144, 323–333 (in German with English abs.). (6) Balić-Žunić, T. and E. Makovicky (1993) Contributions to the crystal chemistry of thallium sulfosalts I. The O-D nature of imhofite. *Neues Jahrb. Mineral., Abh.*, 165, 317–330.