

Crystal Data: Monoclinic. *Point Group:* 2/m. As irregular grains to 0.2 mm.

Physical Properties: *Cleavage:* None. *Fracture:* Irregular. *Tenacity:* Brittle.
Hardness = ~ 3 VHN = 230 (227-234) (10 g load). D(meas.) = n.d. D(calc.) = 7.90

Optical Properties: Opaque. *Color:* Dark gray to black; white in reflected light.

Streak: Dark gray. *Luster:* Metallic.

Optical Class: n.d. *Pleochroism:* White with a faint yellowish tint to white with a faint bluish tint.

Anisotropism: Moderate both in air and in oil, dark gray to brown.

R₁-R₂: (470) 44.5-49.9, (546) 45.1-50.5, (589) 45.6-51.3, (650) 45.4-51.8

Cell Data: *Space Group:* P2₁/m. *a* = 13.182(2) *b* = 4.1840(8) *c* = 15.299(2) *β* = 109.11(1)°
Z = 2

X-ray Powder Pattern: Zálesí uranium deposit, Czech Republic.

3.028 (100), 2.892 (95), 2.980 (88), 3.201 (76), 3.684 (53), 3.625 (53), 2.094 (31)

Chemistry:	(1)	(2)
Cu	0.10	
Ag	10.27	11.41
Cd	0.05	
Pb	11.73	10.96
Bi	43.27	44.22
Se	32.93	33.41
S	0.01	
Total	98.36	100.00

(1) Zálesí uranium deposit, Czech Republic; average of 14 electron microprobe analyses; corresponds to (Ag_{1.84}Cu_{0.03})_{Σ=1.87}(Pb_{1.09}Cd_{0.01})_{Σ=1.10}Bi_{3.99}Se_{8.04}. (2) Ag₂PbBi₄Se₈.

Occurrence: A primary phase in hydrothermal veins in a uranium deposit.

Association: Quartz, uraninite, hematite, uranophane.

Distribution: From the Zálesí uranium deposit, Rychlebské hory Mountains, northern Moravia, Czech Republic.

Name: Honors the Czech mineralogist Dr. Jiří Litochleb (b. 1948), currently head of the Department of Mineralogy and Petrology and director of the Natural History Museum, National Museum, Praha, Czech Republic.

Type Material: National Museum, Prague, Czech Republic (P1P 11/2009).

References: (1) Sejkora, J., E. Makovický, D. Topa, H. Putz, G. Zagler, and J. Plášil (2011) Litochlebite, Ag₂PbBi₄Se₈, a new selenide mineral species from Zálesí, Czech Republic: description and crystal structure. *Can. Mineral.*, 49, 639-650. (2) (2012) *Amer. Mineral.*, 98, 2067-2068 (abs. ref. 1).