

Crystal Data: Monoclinic. *Point Group:* 2/m. As lamellar intergrowths or discrete grains in makovickyite, to 0.3 mm.

Physical Properties: *Cleavage:* None. *Fracture:* Uneven. *Tenacity:* Brittle.
Hardness = 4 VHN = 295 (25 g load). D(meas.) = n.d. D(calc.) = 6.78

Optical Properties: Opaque. *Color:* Gray; grayish white in reflected light. *Streak:* Gray.
Luster: Metallic. *Birefractance:* Moderate (oil). *Anisotrophism:* Strong (oil); dark bluish gray to yellow brown.

Optical Class: n.d.

R₁-R₂: (470) 42.15-48.45, (546) 41.02-46.93, (589) 40.25-45.83, (650) 39.66-45.01

Cell Data: *Space Group:* C2/m. *a* = 13.405(8) *b* = 4.016(3) *c* = 29.949(19) β = 99.989(16)°
Z = 1

X-ray Powder Pattern: Calculated.

3.478 (100), 2.842 (94), 3.646 (57), 3.486 (41), 3.345 (33), 2.964 (33), 2.282 (31)

Chemistry:	(1)	(2)
Cu	7.66	7.86
Ag	4.01	3.34
Pb	9.45	12.81
Bi	60.02	58.15
Te	0.76	
Se	0.30	
S	17.55	17.84
Total	99.75	100.00

(1) Băița Bihor, Romania; average of 5 electron microprobe analyses, corresponding to

Cu_{7.79}Ag_{2.40}Pb_{2.95}Bi_{18.55}(S_{35.37}Se_{0.25}Te_{0.39})_{Σ=36.00}.

(2) Cu₈Pb₄Ag₂Bi₁₈S₃₆.

Occurrence: As exsolution lamellae or discrete grains associated with sulfosalts in contact metamorphic rocks (skarns) around granite and in scheelite-bearing quartz veins in felsic gneisses and amphibolites.

Association: Aikinite-friedrichite, hodrušite, padëraite, kupčikite, emplectite, wittichenite, tetradymite, chalcopyrite, dolomite (Romania); aikinite-krupkaite, hodrušite, cuprobismutite, kupčikite, wittichenite, native bismuth, chalcopyrite, pyrrhotite, quartz (Austria).

Distribution: Băița Bihor, Apuseni Mts, Romania; Felbertal scheelite deposit, Hohe Tauern, Austria.

Name: For its essential copper content and relationship to makovickyite.

Type Material: Division of Mineralogy, University of Salzburg, Austria, 14943 and 14944.

References: (1) Topa, D. and W.H. Paar (2007) Cupromakovickyite, Cu₈Pb₄Ag₂Bi₁₈S₃₆, a new mineral species of the pavonite homologous series. *Can. Mineral.*, 46, 503-514. (2) (2008) *Amer. Mineral.*, 93, 1942 (abs. ref. 1).