Cuboargyrite $AgSbS_2$

Crystal Data: Orthorhombic. *Point Group:* n.d. Myrmekitic and dendritic droplike grains, to 35 μm, within first-generation khatyrkite, and as rounded or irregular grains in cracks and interstices in second-generation khatyrkite.

Physical Properties: Hardness = n.d. VHN = 272–318 (20 g and 50 g loads).
D(meas.) = n.d. D(calc.) = 5.12

Optical Properties: Opaque. *Color:* Steel-yellow. *Luster:* Metallic. *Anisotropism:* Very weak, from pale gray to gray.
R: (400) — , (420) — , (440) 66.8, (460) 66.1, (480) 65.3, (500) 64.5, (520) 63.7, (540) 62.9, (560) 62.1, (580) 61.3, (600) 60.4, (620) 59.7, (640) 58.9, (660) 58.2, (680) 57.7, (700) 57.2

Cell Data: *Space Group:* n.d. $a = 6.95(1)$ $b = 4.16(1)$ $c = 10.04(1)$ Z = 10

X-ray Powder Pattern: Listvenitovyi Stream, Russia.
5.07 (10), 4.12 (8), 3.59 (2), 2.83 (1), 2.607 (1), 2.316 (1), 2.023 (1)

Chemistry:

	(1)
Cu	60.79
Zn	8.42
Al	29.9
Total	99.11

(1) Listvenitovyi Stream, Russia; by electron microprobe, average of nine grains; corresponding to $(Cu_{0.86}Zn_{0.12})_{\Sigma=0.98}Al_{1.00}$.

Occurrence: In black slick washed from greenish gray cover weathering from serpentine.

Association: Khatyrkite, two unnamed zinc aluminides.

Distribution: From near the Listvenitovyi Stream, Khatyrka ultramafic zone of the Koryak–Kamchata fold area, Koryak Mountains, Magadan district, Russia [TL].

Name: For copper, CUPrum, and ALuminum in the composition.

Type Material: Mining Institute, St. Petersburg, Russia, 1688/1.

References: (1) Razin, L.V., N.S. Rudashevskii, and L.N. Vyal'sov (1985) New natural intermetallic compounds of aluminum, copper and zinc – khatyrkite $CuAl_2$, cupalite CuAl and zinc aluminides – from hyperbasites of dunite–harzburgite formation. Zap. Vses. Mineral. Obshch., 114, 90–100 (in Russian). (2) (1986) Amer. Mineral., 71, 1278 (abs. ref. 1).