

Crystal Data: Cubic. *Point Group:* $4/m\bar{3}2/m$, $\bar{4}3m$, or 432. Intergrown with copper aggregates, with individual crystals of cubo-octahedral form, less than 5 μm in size.

Physical Properties: *Tenacity:* Brittle. Hardness = n.d. VHN = 220–267, 247 average (20 g load). $D(\text{meas.}) = 13.0$ $D(\text{calc.}) = 13.1$

Optical Properties: Opaque. *Color:* Tin-white on fresh fracture, quickly altering in moist air to brownish black. *Luster:* Metallic.

R: (400) —, (420) 59.0, (440) 61.4, (460) 63.8, (480) 66.8, (500) 69.4, (520) 71.2, (540) 72.1, (560) 72.8, (580) 73.6, (600) 74.0, (620) 74.6, (640) 75.3, (660) 76.0, (680) 76.9, (700) 77.8

Cell Data: *Space Group:* $Im\bar{3}m$, $I432$, or $I\bar{4}3m$. Synthetic material is $I\bar{4}3m$. $a = 9.418(4)$ $Z = 4$

X-ray Powder Pattern: Magadan region, USSR.

2.22 (100), 2.52 (42), 2.98 (25), 2.09 (25), 2.01 (25), 1.279 (25b), 1.524 (18b)

Chemistry:

	(1)	(2)
Cu	26.6	26.98
Hg	72.6	73.02
Total	99.2	100.00

(1) Magadan region, USSR; by electron microprobe, average of nine analyses, corresponding to Cu_{6.97}Hg_{6.03}. (2) Cu₇Hg₆.

Occurrence: Found in the heavy mineral fraction of concentrates (Magadan region, USSR).

Association: Copper, stibnite, berthierite, pyrite, arsenopyrite, quartz (Magadan region, USSR).

Distribution: At the Krokhalin antimony deposit, Magadan region, basin of the Kolyma River, Yakutia, USSR. At a prospect near Marcelita, about 70 km southeast of Copiapó, Chile.

Name: For the locality near the Kolyma River, USSR.

Type Material: Institute of Mineralogy and Geochemistry of Rare Elements; A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, USSR.

References: (1) Markova, E.A., N.M. Chernitsova, Y.S. Borodaev, L.S. Dubakina, and O.E. Yushko-Zakharova (1980) The new mineral kolymite, Cu₇Hg₆. *Zap. Vses. Mineral. Obshch.*, 109, 206–211 (in Russian). (2) (1981) *Amer. Mineral.*, 66, 218 (abs. ref. 1).