

Crystal Data: Cubic. *Point Group:* n.d. As well-formed cubic crystals, to 0.15 mm, and as aggregates in tin.

Physical Properties: *Tenacity:* Malleable. Hardness = > 2 VHN = 103–127, 115 average. D(meas.) = n.d. D(calc.) = 5.59

Optical Properties: Opaque. *Color:* Pale gray; in polished section, creamy white.

R: (400) —, (420) —, (440) —, (460) 78.0, (480) 79.3, (500) 80.5, (520) 81.2, (540) 81.6, (560) 81.5, (580) 81.3, (600) 81.5, (620) 81.8, (640) 82.0, (660) 82.5, (680) —, (700) —

Cell Data: *Space Group:* n.d. $a = 4.15$ $Z = 1$

X-ray Powder Pattern: Elkiaidai River, Uzbekistan.

3.09 (10), 2.19(10), 1.374 (8), 1.253(7), 1.022 (6), 1.779 (4), 1.537 (4)

Chemistry:	(1)	(2)	(3)	
Sn	56.9	55.55	56.38	49.36
Cu		0.12		
Sb	43.1	44.33	44.13	50.64
Total	100.0	[100.00]	100.51	100.00

(1) Elkiaidai River, Uzbekistan; by electron microprobe; corresponds to $\text{Sn}_{1.15}\text{Sb}_{0.85}$. (2) Rio Tamaná, Colombia; by electron microprobe, recalculated to 100% from an original total of 93.84%; corresponds to $\text{Sn}_{1.12}\text{Sb}_{0.87}$. (3) Baimka placer, Russia; by electron microprobe, corresponds to $\text{Sn}_{1.13}\text{Sb}_{0.87}$. (4) SnSb.

Occurrence: In concentrates from placer deposits from a region of Silurian shaly-sandy sediments (Elkiaidai River, Uzbekistan); in concentrates from precious metal placers (Rio Tamaná, Colombia).

Association: Tin, zircon, “leucoxene”, rutile, apatite, barite, celestine, scheelite, cinnabar (Elkiaidai River, Uzbekistan); tin, sorosite, herzenbergite, cassiterite, lead (Baimka placer, Russia)

Distribution: From the Elkiaidai River, eastern margin of the Northern Nuratau Range, western Uzbekistan [TL]. At the Baimka gold-PGE placer, western Chukotka, Russian Far East, Russia. In the Rio Tamaná, the Department of Chocó, Cauca, Colombia.

Name: For the composition, from Greek STIbium, *antimony*, and STAnnum, *tin*.

Type Material: n.d.

References: (1) Nikolaeva, E.P., V.A. Grigorenko, S.D. Gagarkina, and P.E. Tsyapkina (1970) New natural intermetallic compounds of tin, antimony and copper. *Zap. Vses. Mineral. Obshch.*, 99, 68–70 (in Russian). (2) (1971) *Amer. Mineral.*, 56, 358 (abs. ref. 1). (3) Rose, D. (1981) New data for stistaite and antimony-bearing $\nu\text{-Cu}_6\text{Sn}_5$ from Rio Tamaná, Colombia. *Neues Jahrb. Mineral., Monatsh.*, 117–126. (4) Barkov, A.Y., Laajoki, K.V.O., S.S. Gornostayev, Y.A. Pakhomoovskii, and Y.P. Men’shikov (1998) Sorosite, $\text{Cu}(\text{Sn}, \text{Sb})$, a new mineral from the Baimka placer deposit, western Chukotka, Russian Far East. *Amer. Mineral.*, 83, 901–906. (5) Hägg, R. and A.G. Hybinette (1935) X-ray studies on the systems tin-antimony and tin-arsenic. *Phil. Mag.*, ser. 7, 20, 913–929. (6) Pekov, I.V. (1998) Minerals first discovered on the territory of the former Soviet Union. Ocean Pictures, Moscow, 195.

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