

Crystal Data: Hexagonal. *Point Group:* $6/m\ 2/m\ 2/m$. As hexagonal to anhedral inclusions in tin, to 0.4 mm.

Physical Properties: *Fracture:* Very brittle. Hardness = n.d. VHN = 381–498, 444 average (40–50 g load). D(meas.) = n.d. D(calc.) = 7.6

Optical Properties: Opaque. *Color:* Nearly white with pinkish tint in reflected light. *Anisotropism:* Distinct to moderate; brownish gray to bluish gray. *Bireflectance:* Weak to distinct.

R₁–R₂: (400) —, (420) —, (440) 62.9–70.5, (460) 64.2–72.0, (480) 65.3–73.8, (500) 66.4–75.2, (520) 67.2–76.3, (540) 67.9–77.1, (560) 68.4–77.9, (580) 68.8–78.3, (600) 69.0–78.7, (620) 69.0–78.9, (640) 69.0–79.0, (660) 69.1–79.0, (680) 69.1–79.0, (700) 69.1–79.1

Cell Data: *Space Group:* $P6_3/mmc$ (probable). $a = 4.217(4)$ $c = 5.120(6)$ $Z = 2$

X-ray Powder Pattern: Baimka placer, Russia. 2.970 (10), 2.094 (9), 2.112 (8), 1.487 (5), 1.218 (5), 1.212 (5), 1.333 (4)

Chemistry:

	(1)	(2)
Cu	35.33	35.99
Fe	1.18	trace
Sn	58.18	56.12
Sb	4.77	7.89
Total	99.46	[100.00]

(1) Baimka placer, Russia; by electron microprobe, average of nine analyses; corresponding to $(\text{Cu}_{1.00}\text{Fe}_{0.04})_{\Sigma=1.04}(\text{Sn}_{0.89}\text{Sb}_{0.07})_{\Sigma=0.96}$. (2) Rio Tamaná, Colombia; by electron microprobe, average of nine analyses, recalculated to 100% from an original total of 92.75%; corresponding to $\text{Cu}_{1.05}(\text{Sn}_{0.88}\text{Sb}_{0.12})_{\Sigma=1.00}$.

Occurrence: Very rare, in a gold-PGE placer probably derived from Alaskan-type complexes, formed under low-sulfur reducing conditions (Baimka placer, Russia); in concentrates from precious metal placers (Rio Tamaná, Colombia); in sediments (Mid-Atlantic Ridge).

Association: Tin, stistaite, herzenbergite, cassiterite, lead (Baimka placer, Russia); tin, stistaite (Rio Tamaná, Colombia).

Distribution: From the Baimka gold-PGE placer deposit, in the Bol'shoy Anyuy River area, western Chukotka, Russian Far East, Russia [TL]. In the Rio Tamaná, the Department of Chocó, Cauca, Colombia. From the Mir zone, Mid-Atlantic Ridge (26°N).

Name: To honor George Soros (1930–), American financier, for his support of science in the former Russian republics.

Type Material: St. Petersburg Mining University, St. Petersburg, Russia, 2083/1.

References: (1) Barkov, A.Y., Laajoki, K.V.O., S.S. Gornostayev, Y.A. Pakhomovskii, and Y.P. Men'shikov (1998) Sorosite, Cu(Sn, Sb), a new mineral from the Baimka placer deposit, western Chukotka, Russian Far East. *Amer. Mineral.*, 83, 901–906. (2) 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.