

Crystal Data: n.d. *Point Group:* n.d. Prismatic crystals; may be bent or twisted.

Physical Properties: *Cleavage:* One perfect; another present. Hardness = 2.5 VHN = n.d. D(meas.) = n.d. D(calc.) = n.d.

Optical Properties: Opaque. *Color:* Silver-gray to gray; pure white in reflected light.

Luster: Metallic. *Anisotropism:* Strong.

R₁-R₂: n.d.

Cell Data: *Space Group:* n.d. Z = n.d.

X-ray Powder Pattern: Ustarasai deposit, Uzbekistan.

3.53 (100), 1.102 (100), 1.057 (100), 3.08 (70), 2.508 (70), 1.915 (70), 1.732 (70)

Chemistry:

	(1)	(2)
Pb	10.51	11.35
Cu	0.30	0.74
Fe	0.60	1.40
Bi	65.33	64.90
Sb	2.96	1.87
As		0.15
S	17.25	17.25
insol.	0.34	0.54
Total	97.29	98.20

(1) Ustarasai deposit, Uzbekistan; by electron microprobe, corresponding to Pb_{0.94}Fe_{0.20}Cu_{0.09}(Bi_{5.81}Sb_{0.45})_{Σ=6.26}S_{10.00}. (2) Do.; by electron microprobe, corresponding to Pb_{1.02}Fe_{0.47}Cu_{0.22}(Bi_{5.77}Sb_{0.29}As_{0.04})_{Σ=6.10}S_{10.00}.

Occurrence: In quartz-bismuthinite veins (Ustarasai deposit, Uzbekistan).

Association: Bismuthinite, kobellite, bismuthian jamesonite, quartz (Ustarasai deposit, Uzbekistan).

Distribution: From the Ustarasai bismuth deposit, near Brichmulla, Pskem Mountains, southern Tien-Shan, northeastern Uzbekistan [TL]. At the Pangushan tungsten deposit, Huang sha district, Jiangxi Province, China. In the Monteneme W-Sn mine, Galacia[ck others]??, Spain.

Name: For the locality of first discovery, the Ustarasai deposit, Uzbekistan.

Type Material: n.d.

References: (1) Sakharova, M.S. (1955) On bismuth sulfosalts of the Ustarasai deposits. Trudy Mineral. Muzeya Akad. Nauk SSSR, 7, 112-126 (in Russian). (2) (1956) Amer. Mineral., 41, 814 (abs. ref. 1).