

Crystal Data: Orthorhombic. *Point Group:* $2/m\ 2/m\ 2/m$. Prismatic crystals, up to 4 mm, and platy elongated grains; partly in radial or polycrystalline aggregates. *Twinning:* Common, with twin plane $\parallel [001]$, possibly $\{110\}$; lamellar.

Physical Properties: *Cleavage:* Tabular [*sic*]; $\parallel [100]$. Hardness = Polishing hardness less than chalcopyrite, greater than bismuth. VHN = 126–134 D(meas.) = > 6.2 D(calc.) = n.d.

Optical Properties: Opaque. *Color:* Gray; white in polished section. *Luster:* Metallic. *Pleochroism:* Weak, white with blue tint to brown to light gray. *Anisotropism:* Strong, in gray-bluish and yellowish colors. R₁–R₂: n.d.

Cell Data: *Space Group:* *Bbmm*. $a = 13.399(20)$ $b = 20.505(10)$ $c = 4.117(5)$ $Z = [2]$

X-ray Powder Pattern: Uludağ, Turkey.

2.048 (100), 2.998 (78), 3.670 (67), 3.484 (67), 2.696 (67), 2.794 (44), 3.127 (33)

Chemistry:

	(1)	(2)	(3)
Pb	45.0	45.03	46.57
Ag	1.0	1.41	
Bi	38.5	37.43	37.58
Sb		0.61	
S	14.7	15.53	15.85
Total	99.2	100.01	100.00

(1) Uludağ, Turkey; by electron microprobe, corresponding to (Pb_{4.72}Ag_{0.20})_{Σ=4.92}Bi_{4.00}S_{10.82}.

(2) Shumilovsk deposit, Russia; by electron microprobe, corresponding to (Pb_{4.83}Ag_{0.29})_{Σ=5.12}(Bi_{3.99}Sb_{0.11})_{Σ=4.10}S_{10.78}.

(3) Pb₅Bi₄S₁₁.

Occurrence: In a contact metamorphic scheelite deposit (Uludağ, Turkey); in sulfide veinlets around a greisen Sn–W deposit in granite (Shumilovsk deposit, Russia); in a volcanogenic massive sulfide deposit (Cofer deposit, Virginia, USA).

Association: Sphalerite, tremolite, pyrite, calcite, garnet, quartz, scheelite, chalcopyrite, bismuth (Uludağ, Turkey); kobellite, tintinaite (Boliden, Sweden); wolframite, cassiterite, bismuthinite, galena, cosalite, heyrovskýite, galenobismutite, cannizzarite, tetradymite, joséite-B, bismuth, quartz (Shumilovsk deposit, Russia).

Distribution: From Uludağ, Bursa Province, Turkey [TL]. At Hůrky, Czech Republic. From Băița, Romania. At Boliden, Västerbotten, Sweden. From Vulcano, in the Lipari Islands, Italy. In the Shumilovsk Sn–W deposit, western Transbaikalia, and from the Strezhana pyrite-polymetallic deposit, locality not otherwise defined, Russia. In the USA, at Organ, Doña Ana Co., New Mexico; large crystals in the Abril mine, Middle Pass district, Cochise Co., Arizona; from near Austin, Reese River district, Lander Co., Nevada; in the Cofer deposit, Louisa Co., Virginia. From the Huemules deposit, Chubut Province, Argentina.

Name: For the locality in Bursa Province, Turkey.

Type Material: n.d.

References: (1) Tolun, R. (1954–1955) A study on the concentration tests and beneficiation of the Uludağ tungsten ore. Bull. Mineral Research and Exploration Inst. Turkey, Foreign Ed., 46–47, 106–127 (in English). (2) (1956) Amer. Mineral., 41, 671 (abs. ref. 1). (3) Klominsky, J. M., Rieder, C., Kieft, and L. Mraz (1971) Heyrovskýite, 6(Pb_{0.86}Bi_{0.08}(Ag, Cu)_{0.04})S•Bi₂S₃, from Hůrky, Czechoslovakia, a new mineral of genetic interest. Mineralium Deposita, 6, 133–147. (4) Pokrovskaya, I.V., E.M. Muratov, P.S. Bernshtein, and A.P. Slyusarev (1981) Antimonial bursaite and its paragenesis in the Strezhana deposit. Izv. Akad. Nauk Kaz. SSR, Ser. Geol. 68–76 (in Russian). (5) (1982) Chem. Abs., 96, 22497 (abs. ref. 5). (6) Mozgova, N.N., N.I. Organova, Y.S. Borodaev, E.G. Ryabeva, A.V. Sivtsov, T.I. Getmanskaya, and O.V. Kuzmina (1988) New data on cannizzarite and bursaite. Neues Jahrb. Mineral., Abh., 158, 293–309.

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