

Crystal Data: Monoclinic. *Point Group:* $2/m$. As subhedral crystals, to 2 cm, commonly bent; massive.

Physical Properties: *Cleavage:* Perfect micaceous on {001}, yielding flexible, inelastic lamellae. *Fracture:* Splintery. *Tenacity:* Flexible to some degree, but inelastic. Hardness = 1.5–2 VHN = n.d. D(meas.) = 3.92 D(calc.) = 3.98 (synthetic).

Optical Properties: Transparent. *Color:* Dark blood-red, tarnishes to green to purple iridescence. *Streak:* Red-orange. *Luster:* Pearly to vitreous on cleavage surfaces, otherwise resinous.

Optical Class: Biaxial (+). *Orientation:* $Z = b$; $Y \wedge a = 15(5)^\circ$; $Y \wedge c = 101(5)^\circ$.

Dispersion: $r > v$, strong, crossed. $\alpha = > 2.72$ (Li). $2V(\text{meas.}) = < 46^\circ$ *Anisotropism:* Weak.

R_1 – R_2 : (400) 34.8–37.9, (420) 34.2–37.4, (440) 33.6–36.9, (460) 32.7–36.0, (480) 31.8–34.8, (500) 30.7–33.5, (520) 29.5–31.9, (540) 28.1–30.6, (560) 27.0–29.4, (580) 26.2–28.6, (600) 25.7–28.0, (620) 25.2–27.4, (640) 24.9–27.0, (660) 24.5–26.8, (680) 24.2–26.5, (700) 23.8–26.1

Cell Data: *Space Group:* $P2_1/a$. $a = 11.949(3)$ $b = 9.028(1)$ $c = 10.130(2)$
 $\beta = 116.15(1)^\circ$ $Z = 8$

X-ray Powder Pattern: Zarehshuran, Iran.

3.66 (100), 2.915 (100), 2.880 (100), 4.96 (80), 4.46 (80), 2.815 (80), 4.08 (60)

Chemistry:

	(1)	(2)	(3)
As	25.09	26.50	25.59
Sb	42.04	41.80	41.57
S	32.82	34.30	32.84
Total	99.95	102.60	100.00

(1) Getchell mine, Nevada, USA; average of several analyses. (2) Zarehshuran, Iran. (3) AsSbS₃.

Occurrence: In an epithermal gold deposit formed in a narrow, steeply-dipping fault zone cutting interbedded Paleozoic (?) shales, argillites, and limestones, near a granodiorite intrusive (Getchell mine, Nevada, USA).

Association: Orpiment, realgar, stibnite, cinnabar, galkhaite, laffittite, chabournéite, christite, lorandite, marcasite, quartz, barite, fluorite, calcite.

Distribution: In the USA, in Nevada, from the Getchell mine, about 32 km northeast of Golconda, Potosi district, Humboldt Co. [TL], and in the Carlin mine, 50 km northwest of Elko, Lynn district, Eureka Co. At the Zarehshuran gold deposit, 35 km north of Takab, northwestern Iran. From the Gal-Khaya deposit, Sakha, Russia. At Khaydarkan and in the Chauvai Sb–Hg deposit, Fergana Valley, Alai Range, Kyrgyzstan. From the Toya mine, Abuta, Hokkaido, Japan.

Name: For the Getchell mine, Nevada, USA, where it was discovered.

Type Material: National Museum of Natural History, Washington, D.C., USA, 118159, 118160.

References: (1) Weissberg, B.G. (1965) Getchellite, AsSbS₃, a new mineral from Humboldt County, Nevada. *Amer. Mineral.*, 50, 1817–1826. (2) Bariand, P., F. Cesbron, H. Agrinier, J. Geffroy, and V. Issakhanian (1968) La getchellite AsSbS₃ de Zarehshuran, Afshar, Iran. *Bull. Soc. fr. Minéral.*, 91, 403–406 (in French). (3) Kyono, A. and M. Kimata (2004) Structural reinvestigation of getchellite As_{0.98}Sb_{1.02}S_{3.00}. *Amer. Mineral.*, 89, 696–700.