

Crystal Data: Cubic. *Point Group:* $2/m\bar{3}$. As sparse elongate grains, to 3.5 cm.

Physical Properties: *Tenacity:* Brittle. Hardness = 3 VHN = 280–292
D(meas.) = 9.98 (synthetic). D(calc.) = 9.91

Optical Properties: Opaque. *Color:* Gray, with a bornitelike tarnish; in polished section, galenelike with pinkish tinge. *Luster:* Metallic.

R: (400) 56.4, (420) 57.2, (440) 57.9, (460) 58.6, (480) 59.1, (500) 59.6, (520) 60.0, (540) 60.3, (560) 60.6, (580) 61.0, (600) 61.3, (620) 61.5, (640) 61.6, (660) 61.5, (680) 61.4, (700) 61.2

Cell Data: *Space Group:* $Pa\bar{3}$. $a = 6.633$ $Z = 4$

X-ray Powder Pattern: Giant Yellowknife mine, Canada.

1.999 (100), 3.32 (50), 0.865 (50), 2.97 (40), 0.783 (40), 2.34 (40), 2.71 (30)

Chemistry:

	(1)	(2)
Au	44.1	44.72
Ag	< 0.1	
Sb	55.9	55.28
Total	100.0	100.00

(1) Hillgrove deposit, Australia; by electron microprobe, average of 15 analyses; corresponding to Au_{1.00}Sb_{2.05}. (2) AuSb₂.

Mineral Group: Pyrite group.

Occurrence: In hydrothermal gold-quartz veins, in portions deficient in sulfur and containing other antimony minerals.

Association: Gold, freibergite, stibnite, jamesonite, chalcostibite, bournonite, boulangerite, arsenopyrite, pyrite, chalcopyrite, sphalerite, galena, tetrahedrite.

Distribution: In Canada, from the Giant Yellowknife mine, Yellowknife, Northwest Territories [TL]; the Chesterville mine, Larder Lake and the Hemlo gold deposit, Thunder Bay district, Ontario. At Krásná Hora, near Mílešov, Czech Republic. From the Vigés Au–Sb deposit, Creuse, France. In the Langele deposit, Skellefte district, Sweden. At the Kallisalo gold deposit, Seinäjoki district, western Finland. From Sulitjelma, northern Norway. In the Bestyube goldfield, northern Kazakhstan. In Australia, at the Costerfield Au–Sb mine and the Nagambie gold deposit, Victoria, and in the Hillgrove Sb–Au deposit, 25 km east of Armidale, New South Wales. From the Woxi gold deposit, Hebei Province, China. In the Lone Hand and Jessie gold mines, Gwanda district; and the Indrarama Au–Sb mine, Sebakwe area, Que-Que, Zimbabwe. From the Mobale mine, Kivu Province, Congo (Zaire). At the Ashanti gold deposit, Obuasi, Ghana. Additional localities are known.

Name: In reference to its composition.

Type Material: Canadian Geological Survey, Ottawa; Royal Ontario Museum, Toronto, Canada.

References: (1) Graham, A.R. and S. Kaiman (1952) Aurostibite, AuSb₂; a new mineral in the pyrite group. *Amer. Mineral.*, 37, 461–469. (2) Naz'mova, G.N., E.M. Spiridonov and Y.S. Shalaye (1975) Aurostibite from the Bestyube deposit, northern Kazakhstan. *Doklady Acad. Nauk SSSR*, 222, 687–689 (in Russian). (3) Ashley, P.M., N.D.J. Cook, and R.L. Hill (1990) Occurrence and significance of aurostibite in Sb–Au ore from Hillgrove, New South Wales, Australia. *Neues Jahrb. Mineral., Monatsh.*, 537–551. (4) Criddle, A.J. and C.J. Stanley, Eds. (1993) Quantitative data file for ore minerals, 3rd ed. Chapman & Hall, London, 30.

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