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

**Physical Properties:** **Tenacity:** Brittle. **Hardness** = 3 \( VHN = 280-292 \)
\( D(\text{meas.}) = 9.98 \) (synthetic). \( D(\text{calc.}) = 9.91 \)

**Optical Properties:** Opaque. **Color:** Gray, with a bornitelike tarnish; in polished section, galenalike 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\( _3 \). \( a = 6.633 \) \( Z = 4 \)

**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:**

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Au</td>
<td>44.1</td>
<td>44.72</td>
</tr>
<tr>
<td>Ag</td>
<td>&lt; 0.1</td>
<td></td>
</tr>
<tr>
<td>Sb</td>
<td>55.9</td>
<td>55.28</td>
</tr>
</tbody>
</table>

Total 100.0 100.00

(1) Hillgrove deposit, Australia; by electron microprobe, average of 15 analyses; corresponding to \( \text{Au}_1.06\text{Sb}_{2.05} \). (2) \( \text{AuSb}_2 \).

**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, bouroninite, 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 Milesov, Czech Republic. From the Viges Au–Sb deposit, Creuse, France. In the Langsele deposit, Skellefte district, Sweden. At the Kallisalo gold deposit, Seinajoki 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 Indarama 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.


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