

**Crystal Data:** Monoclinic. *Point Group:* 2. As aggregates of equant, polygonal grains and short, to 0.5 mm, stubby prisms that may be striated parallel to their length; prisms rarely curved, in nests of curved, grooved, pseudo-hexagonal plates. *Twinning:* Polysynthetically twinned on {010} as parallel lamellae 25 μm wide, on { $\bar{2}01$ } as short tapering lamellae and on { $\bar{1}10$ } and {001}.

**Physical Properties:** *Cleavage:* Parting {010} perfect, several others less perfect, paralleling the twinning composition planes. *Tenacity:* Brittle. Hardness = n.d. VHN = 118 (100 g load). D(meas.) = 6.52 D(calc.) = 6.44

**Optical Properties:** Opaque. *Color:* Bright white. *Streak:* Black. *Luster:* Metallic. *Pleochroism:* Distinct, from yellowish white with a slightly pinkish tint, to very pale gray in air; in oil, strong, from pale pinkish gray with a very faint blue-green tint. *Anisotropism:* Strong, in vivid pinks, pale orange, yellow, pale greenish blue and pale green.

R<sub>1</sub>–R<sub>2</sub>: n.d.

**Cell Data:** *Space Group:* C2.  $a = 7.252(1)$   $b = 4.172(4)$   $c = 4.431(2)$   $\beta = 123^\circ 8.4(1.4)'$   
Z = 1

**X-ray Powder Pattern:** Broken Hill, Australia.  
3.06 (100), 2.09 (70), 2.21 (60), 3.72 (40), 1.730 (40), 1.521 (40), 1.392 (40)

<b>Chemistry:</b>	(1)
	Sb 82.9
	As 18.6
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	Total 101.5

(1) Broken Hill, Australia; by electron microprobe, corresponding to Sb<sub>2.93</sub>Sb<sub>1.07</sub>.

**Occurrence:** Replacing calcite (Broken Hill, Australia).

**Association:** Antimonian löllingite, stibarsen, calcite (Broken Hill, Australia).

**Distribution:** From the Consols mine, Broken Hill, New South Wales, Australia [TL]. At Atlin, British Columbia, Canada. In Mexico, from the Moctezuma (Bambolla) mine, 12 km south of Moctezuma, Sonora. In the Szklary serpentinite massif, southwest Poland.

**Name:** From the Greek for *unexpected alloy*.

**Type Material:** National Museum of Natural History, Washington, D.C., USA, R419.

**References:** (1) Leonard, B.F., C.W. Mead, and J.J. Finney (1971) Paradocrasite, Sb<sub>2</sub>(Sb, As)<sub>2</sub>, a new mineral. *Amer. Mineral.*, 56, 1127–1146. (2) Cureton, F. (1996) Letters. *Mineral. Record*, 26, 70–71.