Paradocrasite

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, pseudohexagonal plates. Twinning: Poly synthetically twinned on {010} as parallel lamellae 25 µm wide, on {201} as short tapering lamellae and on {T10} 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


Cell Data: Space Group: C2. a = 7.252(1)  b = 4.172(4)  c = 4.431(2)  β = 123°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)

Chemistry:

<table>
<thead>
<tr>
<th>Element</th>
<th>Fraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sb</td>
<td>82.9</td>
</tr>
<tr>
<td>As</td>
<td>18.6</td>
</tr>
<tr>
<td>Total</td>
<td>101.5</td>
</tr>
</tbody>
</table>

(1) Broken Hill, Australia; by electron microprobe, corresponding to Sb_{2.93}Sb_{1.07}.

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.
