Rosiaite \( \text{PbSb}_2\text{O}_6 \)

Crystal Data: Hexagonal. Point Group: \( \overline{3} 2/m \). As flat tabular hexagonal crystals, with large \{0001\}, modified by \{10\( \overline{1} \)1\}, \{10\( \overline{1} \)0\}, and \{hk\( \overline{1} \)l\}, to 0.3 mm, in aggregates.


Cell Data: Space Group: \( \text{P} \overline{3} \text{1m} \). \( a = 5.295(1) \) \( c = 5.372(1) \) \( Z = 1 \)

X-ray Powder Pattern: Cetine mine, Italy. 3.49 (vs), 2.648 (m), 2.110 (w), 1.887 (w), 1.651 (w), 1.531 (w), 2.688 (vw)

Chemistry:

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \text{Sb}_2\text{O}_5 )</td>
<td>58.67</td>
<td>59.17</td>
</tr>
<tr>
<td>( \text{PbO} )</td>
<td>40.88</td>
<td>40.83</td>
</tr>
<tr>
<td>Total</td>
<td>99.55</td>
<td>100.00</td>
</tr>
</tbody>
</table>

(1) Cetine mine, Italy; by electron microprobe, average of three analyses; corresponding to \( \text{Pb}_{1.01}\text{Sb}_{2.00}\text{O}_6 \). (2) \( \text{PbSb}_2\text{O}_6 \).

Occurrence: From an antimony deposit in highly silicified evaporites (Cetine mine, Italy).

Association: Valentinite, tripuyoite, bindheimite (Cetine mine, Italy).

Distribution: From the Cetine mine, 20 km southwest of Siena, and the Tafone mine, Grosseto, Tuscany, Italy.

Name: For the village of Rosia, near the Cetine mine, Italy.

Type Material: University of Genoa, Genoa, Italy.