**Paolovite**  \( \text{Pd}_2\text{Sn} \)

Crystal Data: Orthorhombic. Point Group: \( 2/m \ 2/m \ 2/m \). As irregular grains embedded in other minerals. Twinning: Polysynthetic.


Cell Data: Space Group: \( \text{Pbnm} \). \( a = 8.11(1) \), \( b = 5.662(6) \), \( c = 4.324(2) \) Z = 4

X-ray Powder Pattern: Oktyabr deposit, Russia.

2.28 (100), 2.16 (70), 1.955 (50), 2.36 (40), 1.397 (40), 1.315 (40), 1.120 (40)

Chemistry:

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
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<tbody>
<tr>
<td>Pd</td>
<td>64.8</td>
<td>64.3</td>
<td>64.19</td>
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<tr>
<td>Pt</td>
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<tr>
<td>Sn</td>
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<td>35.0</td>
<td>35.81</td>
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<tr>
<td>Sb</td>
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<tr>
<td>Bi</td>
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<tr>
<td>Total</td>
<td>103.3</td>
<td>99.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(1) Oktyabr deposit, Russia; by electron microprobe, corresponding to \( (\text{Pd}_{1.98}\text{Pt}_{0.04})_2\text{Sn}_{0.98} \).
(2) Western Platinum mine, South Africa; by electron microprobe, corresponding to \( \text{Pd}_{2.02}\text{Sn}_{0.98} \).
(3) \( \text{Pd}_2\text{Sn} \).

Occurrence: In Cu–Ni sulfide ores; in cubanite–chalcopyrite, cubanite–talnakhite, and cubanite–mooihoekite assemblages (Oktyabr deposit, Russia).

Association: Cubanite, chalcopyrite, galena, talnakhite, mooihoekite, magnetite, sperrylite, sobolevskite, taimyrite, polarian, maslovite, atokite–rustedbergite, froodite, silver, palladium, bismuth.

Distribution: In Russia, from the Oktyabr deposit, Talnakh area, Noril’sk region, western Siberia [TL] and in the Kingsh massif, eastern Sayan. At the Atok, Western Platinum, and Rustenberg mines, in the Merensky Reef, Bushveld complex, Transvaal, South Africa. From Little Darling Creek, east of Broken Hill, New South Wales, Australia. In the Strathcona deposit, Sudbury, and the Geordie Lake intrusion, Coldwell complex, Ontario, Canada.

Name: For the chemical composition, PAlladium and olovo, tin (in Russian).

Type Material: A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia, 75509.