Stibioclaudetite

AsSbO₃

Crystal Data: Monoclinic. Point Group: 2/m. Crystals display dominant {010}, with {1 01}, {110}, and {111} modifications to 6 mm.


Cell Data: Space Group: P2₁/n. a = 4.5757(4) b = 13. 1288(13) c = 5.4216(5) β = 95.039(4)° Z = 4

X-Ray Diffraction Pattern: Tsumeb mine, Namibia. 3.512 (100), 3.282 (82), 3.238 (71), 2.8048 (39), 2.2790 (34), 4.995 (32), 2.8006 (31)

Chemistry:

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>As₂O₃</td>
<td>45.15</td>
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<tr>
<td>Sb₂O₃</td>
<td>55.77</td>
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<tr>
<td>Total</td>
<td>100.92</td>
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</tbody>
</table>

(1) Tsumeb mine, Namibia; average electron microprobe analysis supplemented by Raman spectroscopy; corresponds to As₁.088Sb₀.912O₃.

Occurrence: In a cavity in massive tennantite from the oxidized zone. Reported as a daughter phase in fluid inclusions in granitic pegmatites.

Association: Leiteite, ludlockite, smithsonite, quartz.

Distribution: From the Tsumeb mine, Namibia.

Name: The prefix, stibio, identifies the antimony analog of claudetite.
