

**Crystal Data:** Monoclinic. *Point Group:* 2/m. Crystals display dominant {010}, with  $\{1\ 0\ 1\}$ , {110}, and {111} modifications to 6 mm.

**Physical Properties:** *Cleavage:* Perfect on {010}. *Tenacity:* Flexible cleavage plates.  
*Fracture:* n.d. Hardness = ~2 D(meas.) = n.d. D(calc.) = 5.009

**Optical Properties:** Transparent. *Color:* Colorless. *Streak:* White. *Luster:* Adamantine.  
*Optical Class:*  $n > 2.00$

**Cell Data:** *Space Group:*  $P2_1/n$ .  $a = 4.5757(4)$   $b = 13.1288(13)$   $c = 5.4216(5)$   
 $\beta = 95.039(4)^\circ$   $Z = 4$

**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)

<b>Chemistry:</b>	(1)
As <sub>2</sub> O <sub>3</sub>	45.15
<u>Sb<sub>2</sub>O<sub>3</sub></u>	<u>55.77</u>
Total	100.92

(1) Tsumeb mine, Namibia; average electron microprobe analysis supplemented by Raman spectroscopy; corresponds to As<sub>1.088</sub>Sb<sub>0.912</sub>O<sub>3</sub>.

**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*.

**Type Material:** National Museum of Natural History, Washington, D.C., USA (174550).

References: (1) Origlieri, M.J., R.T. Downs, W.W. Pinch, and G.L. Zito (2009) Stibioclaudetite AsSbO<sub>3</sub> a new mineral from Tsumeb, Namibia. *The Mineralogical Record*, 40, 209-213.

(2) Anderson, A.J. and T. McCarron (2011) Three-dimensional textural and chemical characterization of polyphase inclusions in spodumene using a dual focused ion beam-scanning electron microscope (FIB-SEM). *Can. Mineral.*, 49(2), 541-553.