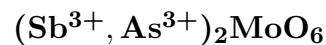


**Biehlite**

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**Crystal Data:** Monoclinic. *Point Group:*  $2/m$ . Crystals are fibrous, to 1 cm, elongated along [001], in felted masses and irregular aggregates.

**Physical Properties:** *Tenacity:* Flexible. Hardness = "Soft".  $D(\text{meas.}) = \text{n.d.}$   
 $D(\text{calc.}) = 5.23$

**Optical Properties:** Translucent. *Color:* White. *Streak:* White. *Luster:* Silky.  
*Optical Class:* [Biaxial.]  $n = [2.13]$  (by the rule of Gladstone and Dale).  $\alpha = \text{n.d.}$   $\beta = \text{n.d.}$   
 $\gamma = \text{n.d.}$   $2V(\text{meas.}) = \text{n.d.}$

**Cell Data:** *Space Group:*  $C2/c$ .  $a = 18.076(5)$   $b = 5.920(5)$   $c = 5.083(5)$   $\beta = 96.97(1)^\circ$   
 $Z = 4$

**X-ray Powder Pattern:** Tsumeb, Namibia; shows strong preferred orientation.  
2.990 (100), 2.960 (100), 5.622 (65), 3.104 (61), 2.104 (42), 3.376 (39), 1.962 (32)

**Chemistry:**

	(1)
MoO <sub>3</sub>	33.76
Sb <sub>2</sub> O <sub>3</sub>	60.99
As <sub>2</sub> O <sub>3</sub>	4.95
<hr/>	
Total	99.70

(1) Tsumeb, Namibia; by electron microprobe, average of five analyses; corresponds to  $(\text{Sb}_{1.79}\text{As}_{0.21})_{\Sigma=2.00}\text{Mo}_{1.00}\text{O}_6$ .

**Occurrence:** A rare secondary mineral from an oxidized zone in a dolostone-hosted hydrothermal polymetallic ore deposit.

**Association:** Anglesite, wulfenite.

**Distribution:** From Tsumeb, Namibia.

**Name:** To honor Dr. Friedrich Karl Biehl (1887–?), mineralogist, Westfälische-Wilhelms University, Münster, Germany, who authored an early dissertation on Tsumeb species.

**Type Material:** Hamburg University, Hamburg, Germany.

**References:** (1) Schlüter, J., K.-H. Klaska, G. Adiwidjaja, K. Friese, and G. Gebhard (2000) Biehlite,  $(\text{Sb}, \text{As})_2\text{MoO}_6$ , a new mineral from Tsumeb, Namibia. *Neues Jahrb. Mineral., Monatsh.*, 234–240. (2) (2001) *Amer. Mineral.*, 86, 197 (abs. ref. 1).