

**Crystal Data:** Triclinic. *Point Group:*  $\bar{1}$ . As coatings of indistinct radiating platy crystals in rosette-shaped aggregates to 3 mm, also as botryoidal crusts.

**Physical Properties:** *Cleavage:* Very good on {010}. *Fracture:* Uneven. *Tenacity:* Brittle. Hardness = ~2 D(meas.) = 3.16(1) D(calc.) = 3.26

**Optical Properties:** Transparent to translucent. *Color:* Colorless to white. *Streak:* White. *Luster:* Vitreous. *Optical Class:* Biaxial.  $\alpha' = 1.602(2)$   $\gamma' = 1.658(2)$

**Cell Data:** *Space Group:*  $P\bar{1}$ .  $a = 8.5606(5)$   $b = 7.6926(6)$   $c = 5.7206(4)$   $\alpha = 92.605(6)^\circ$   $\beta = 109.9002(6)^\circ$   $\gamma = 109.9017(6)^\circ$   $Z = 2$

**X-ray Powder Pattern:** Geschieber vein, Jáchymov district, Western Bohemia, Czech Republic. 3.554 (100), 3.697 (49), 3.097 (49), 3.766 (35), 3.968 (33), 3.259 (33), 4.478 (25)

Chemistry:	(1)	(2)	(3)
CaO	17.51	17.26	17.42
Na <sub>2</sub> O		0.12	
MgO	0.12	0.17	
SiO <sub>2</sub>		0.10	
As <sub>2</sub> O <sub>5</sub>	70.56	71.27	71.39
P <sub>2</sub> O <sub>5</sub>	0.64	0.08	
SO <sub>3</sub>	0.18	0.15	
H <sub>2</sub> O	[11.22]	[11.19]	11.19
Total	100.23	100.35	100.00

(1) Geschieber vein, Jáchymov district, Western Bohemia, Czech Republic; average of 10 electron microprobe analyses supplemented by Raman spectroscopy, H<sub>2</sub>O calculated from stoichiometry; corresponding to (Ca<sub>1.00</sub>Mg<sub>0.01</sub>)<sub>Σ=1.01</sub>[AsO<sub>2</sub>(OH)<sub>2</sub>]<sub>1.96</sub>[PO<sub>2</sub>(OH)<sub>2</sub>]<sub>0.03</sub>(SO<sub>4</sub>)<sub>0.01</sub>. (2) Geschieber vein, Jáchymov district, Western Bohemia, Czech Republic; average of 5 electron microprobe analyses supplemented by Raman spectroscopy, H<sub>2</sub>O calculated from stoichiometry; corresponding to (Ca<sub>0.99</sub>Mg<sub>0.01</sub>Na<sub>0.01</sub>)<sub>Σ=1.01</sub>[AsO<sub>2</sub>(OH)<sub>2</sub>]<sub>1.99</sub>[PO<sub>2</sub>(OH)<sub>2</sub>]<sub>0.01</sub>(SiO<sub>4</sub>)<sub>0.01</sub>(SO<sub>4</sub>)<sub>0.01</sub>. (3) Ca[AsO<sub>2</sub>(OH)<sub>2</sub>]<sub>2</sub>.

**Occurrence:** A secondary mineral coating granite near a polymetallic hydrothermal vein.

**Association:** None given.

**Distribution:** From the Geschieber vein, 12<sup>th</sup> level, Svornost/Einigkeit mine, Jáchymov district, Western Bohemia, Krušné hory Mts., Czech Republic.

**Name:** Honors Dr. Jaroslav Švenek (1927-1994), the former curator of the mineralogical collection of the National Museum in Prague, Czech Republic.

**Type Material:** National Museum, Prague, Czech Republic (P1p 2/99).

**References:** (1) Ondruš, P., R. Skála, J. Plášil, J. Sejkora, F. Veselovský, J. Čejka, A. Kallistová, J. Hloušek, K. Fejfarová, R. Škoda, M. Dušek, A. Gabašová, V. Machovič, and L. Lapčák (2013) Švenekite, Ca[AsO<sub>2</sub>(OH)<sub>2</sub>]<sub>2</sub>, a new mineral from Jáchymov, Czech Republic. *Mineral. Mag.*, 77(6), 2711-2724. (2) (2015) *Amer. Mineral.*, 100, 2360-2361 (abs. ref. 1).