

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 ₂ O		0.12	
MgO	0.12	0.17	
SiO ₂		0.10	
As ₂ O ₅	70.56	71.27	71.39
P ₂ O ₅	0.64	0.08	
SO ₃	0.18	0.15	
H ₂ 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, H₂O calculated from stoichiometry; corresponding to $(\text{Ca}_{1.00}\text{Mg}_{0.01})_{\Sigma=1.01}[\text{AsO}_2(\text{OH})_2]_{1.96}[\text{PO}_2(\text{OH})_2]_{0.03}(\text{SO}_4)_{0.01}$. (2) Geschieber vein, Jáchymov district, Western Bohemia, Czech Republic; average of 5 electron microprobe analyses supplemented by Raman spectroscopy, H₂O calculated from stoichiometry; corresponding to $(\text{Ca}_{0.99}\text{Mg}_{0.01}\text{Na}_{0.01})_{\Sigma=1.01}[\text{AsO}_2(\text{OH})_2]_{1.99}[\text{PO}_2(\text{OH})_2]_{0.01}(\text{SiO}_4)_{0.01}(\text{SO}_4)_{0.01}$. (3) Ca[AsO₂(OH)₂]₂.

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

Association: None given.

Distribution: From the Geschieber vein, 12th 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[AsO₂(OH)₂]₂, a new mineral from Jáchymov, Czech Republic. Mineral. Mag., 77(6), 2711-2724. (2) (2015) Amer. Mineral., 100, 2360-2361 (abs. ref. 1).