

Crystal Data: Triclinic. *Point Group:* $\bar{1}$. As acicular to tabular crystals, to 1 mm, and as rosettes and spherical divergent sprays to 5 mm.

Physical Properties: *Cleavage:* Perfect on {011}; good on {010}. *Fracture:* Irregular. *Tenacity:* Very brittle. $D(\text{meas.}) = 3.05(1)$ $D(\text{calc.}) = 3.05$ *Hardness* = 3.5-4

Optical Properties: Transparent to translucent. *Color:* Colorless with a green tint, pale green, light blue to blue-green. *Streak:* White. *Luster:* Vitreous. *Optical Class:* Biaxial (+). $\alpha' = 1.591(2)$ $\beta' = 1.620(2)$ $\gamma' = 1.701(2)$ $2V(\text{calc.}) = \sim 64^\circ$ *Pleochroism:* Moderate; X = light gray to colorless, Y = very light greenish gray, Z = light green. Elongation (-) on (011) and extinction = 27° , elongation (+) on (010) and extinction = 17° .

Cell Data: *Space Group:* $P\bar{1}$. $a = 6.408(3)$ $b = 14.491(5)$ $c = 16.505(8)$
 $\alpha = 102.87(3)$ $\beta = 101.32(5)$ $\gamma = 97.13(3)^\circ$ $Z = 1$

X-ray Powder Pattern: Jáchymov, Czech Republic.

11.98 (100), 5.992 (6), 3.448 (5), 2.967 (5), 2.4069 (4), 2.4002 (4), 15.70 (3)

Chemistry:	(1)	(2)	(3)
CaO		0.07	
FeO	0.12	0.04	
CuO	39.93	39.99	39.26
ZnO		0.12	
Al_2O_3	0.13	0.38	
As_2O_5	44.71	46.03	43.36
P_2O_5		0.10	
H_2O	17.31	[18.2]	17.10
Total	102.20	104.93	100.00

(1) Jáchymov, Czech Republic; average of 6 electron microprobe analyses supplemented by IR spectroscopy, H_2O by TGA; corresponds to $(\text{Cu}_{12.96}\text{Al}_{0.07}\text{Fe}_{0.04})_{\Sigma=13.07}(\text{AsO}_4)_{6.11}(\text{AsO}_3\text{OH})_{3.93} \cdot 22.83\text{H}_2\text{O}$. (2) Krásno district, Czech Republic; average of 3 electron microprobe analyses supplemented by IR spectroscopy, H_2O calculated from structure analysis; corresponds to $(\text{Cu}_{12.51}\text{Al}_{0.19}\text{Zn}_{0.04}\text{Ca}_{0.03}\text{Fe}_{0.01})_{\Sigma=12.78}(\text{AsO}_4)_{5.70}(\text{PO}_4)_{0.04}(\text{AsO}_3\text{OH})_{4.27} \cdot 23\text{H}_2\text{O}$. (3) $\text{Cu}_{13}(\text{AsO}_4)_6(\text{AsO}_3\text{OH})_4 \cdot 23\text{H}_2\text{O}$.

Occurrence: A secondary mineral formed during the weathering of primary tennantite and chalcopyrite in a complex polymetallic hydrothermal vein deposit.

Association: Lavendulan, geminite, lindackerite, ondrúšite (Jáchymov); amorphous Cu, Fe arsenates and clay minerals (Krásno district).

Distribution: From the Huber open pit, Krásno district, near Horní Slavkov, Slavkovský Les Mountains and from the Geschieber vein, Daniel level, Svornost mine, Jáchymov district, Krušné hory Mountains, Czech Republic.

Name: For Horní Slavkov, Czech Republic, from where the first specimens were collected.

Type Material: National Museum, Prague, Czech Republic (PIN 83.038).

References: (1) Sejkora, J., J. Plášil, P. Ondruš, F. Veselovský, I. Císařová, and J. Hloušek (2010) Slavkovite, $\text{Cu}_{13}(\text{AsO}_4)_6(\text{AsO}_3\text{OH})_4 \cdot 23\text{H}_2\text{O}$, a new mineral species from Horní Slavkov and Jáchymov, Czech Republic: description and crystal-structure determination. *Can. Mineral.*, 48, 1157-1170. (2) (2011) *Amer. Mineral.*, 96, 1659-1660(abs. ref. 1).