

Crystal Data: Tetragonal. *Point Group:* 4/m 2/m 2/m. As anhedral to subhedral grains to 100 μm or as rims partly replacing pentlandite.

Physical Properties: Cleavage: n.d. *Tenacity:* Brittle. *Fracture:* n.d. Hardness = n.d. D(meas.) = n.d. D(calc.) = 6.477

Optical Properties: Opaque. *Color:* Creamy yellow in reflected light. *Streak:* n.d.

Luster: Metallic.

Optical Class: Anisotropism: Pale blue to brown. *Birefractance:* Barely perceptible.

Pleochroism: Weak.

R₁-R₂: (470) 41.8-46.4, (546) 47.2-50.6, (589) 49.4-52.3, (650) 51.3-53.2

Cell Data: *Space Group:* I4/mmm. *a* = 9.7856(3) *c* = 10.7582(6) *Z* = 2

X-ray Powder Pattern: Calculated pattern.

1.810 (100), 2.357 (96), 1.751 (91), 3.094 (85), 2.682 (81), 2.188 (75), 3.560 (56)

Chemistry:	(1)	(2)
Ni	48.05	52.58
Co	2.13	
Fe	2.49	
Sb	18.33	18.17
As	3.32	3.73
S	25.66	25.52
Total	101.08	100.00

(1) Tsangli chromite deposit, Othrys ophiolite, central Greece; representative electron microprobe analysis; corresponds to (Ni_{16.19}Co_{1.01}Fe_{0.83})Σ=18.03Sb₃(As_{0.67}Sb_{0.32})Σ=0.99S_{15.98}. (2) Ni₁₈Sb₃AsS₁₆.

Mineral Group: Hauchecornite group.

Occurrence: In ophiolite. Likely precipitated during late hydrothermal stages by reaction of Sb- and As-bearing solutions with magmatic sulfides or during the serpentinization of the host peridotite.

Association: Pentlandite, breithauptite, gersdorffite, chlorite.

Distribution: From the Tsangli chromite deposit, Othrys ophiolite, ~40 km northeast of Domokos village and 1 km northeast of Eretria village, central Greece.

Name: The prefix indicates the As-dominant analogue of *tučekite*.

Type Material: Natural History Museum, London, England (BM 2020,1).

References: (1) Zaccarini, F., L. Bindi, B. Tsikouras, T. Grammatikopoulos, C.J. Stanley, and G. Garuti (2020) Arsenotučekite, Ni₁₈Sb₃AsS₁₆, a new mineral from the Tsangli chromitites, Othrys ophiolite, Greece. *Mineralogy and Petrology*, 114, 435-442.