

Crystal Data: Monoclinic. *Point Group:* 2/m. As tiny (27 x 27 to 55 x 100 μm) grains.

Physical Properties: Hardness = n.d. VHN = 376–399, 388 average, and 296–308, 302 average on two grains (15 g load). D(meas.) = 10.25 (synthetic). D(calc.) = 10.62

Optical Properties: Opaque. *Color:* In polished section, cream with a yellowish tint. *Luster:* Metallic. *Pleochroism:* None in air, very faintly discernible in oil.

Anisotropism: Moderate to strong in air, strong in oil, in gray to light brownish gray.

R: (400) —, (420) 44.6, (440) 45.3, (460) 45.9, (480) 46.7, (500) 47.8, (520) 49.0, (540) 50.0, (560) 51.3, (580) 52.6, (600) 53.9, (620) 55.2, (640) 56.5, (660) 57.8, (680) 58.9, (700) 60.1

Cell Data: *Space Group:* P2₁/c. *a* = 7.456(6) *b* = 13.936(5) *c* = 8.842(9) β = 91.94°
Z = 4

X-ray Powder Pattern: Stillwater Complex, Montana, USA.

2.237 (100), 1.305 (80b), 2.543 (70), 2.134 (60), 2.094 (60), 1.961 (60), 2.196 (50b)

Chemistry:

	(1)	(2)
Pd	65.4	65.23
Sn	0.07	
As	0.33	
Bi	0.15	
Sb	0.12	
Te	34.1	34.77
Total	100.17	100.00

(1) Stillwater Complex, Montana, USA; by electron microprobe, yielding Pd_{8.99}(Te_{3.91}As_{0.07}Bi_{0.01}Sn_{0.01}Sb_{0.01})_{Σ=4.01}. (2) Pd₉Te₄.

Occurrence: As tiny grains in mineral concentrates.

Association: Keithconnite, magnetite, kotulskite, merenskyite, moncheite, braggite, vysotskite.

Distribution: From the Banded and Upper Zones of the Stillwater Complex, Montana, USA.

Name: For the composition.

Type Material: National Museum of Natural History, Washington, D.C., USA, 144958; Canadian Geological Survey, Ottawa; Royal Ontario Museum, Toronto, Canada.

References: (1) Cabri, L.J., J.R. Rowland, J.H.G. Laflamme, and J. M. Stewart (1979) Keithconnite, telluropalladinite and other Pd–Pt tellurides from the Stillwater Complex, Montana. *Can. Mineral.*, 17, 589–594. (2) Matkovic, P. and K. Schubert (1978) Kristallstruktur von Pd₉Te₄. *Jour. Less Common Metals*, 58, 39–46.