

**Crystal Data:** Triclinic. *Point Group:* n.d. Massive, as veinlets and lenses in microlite, to 0.05 mm.

**Physical Properties:** Hardness = n.d. VHN = 1300 (20 g load). D(meas.) = n.d. D(calc.) = 8.45 Weak blue cathodoluminescence.

**Optical Properties:** Transparent. *Color:* Colorless; grayish white in reflected light. *Luster:* Adamantine.

*Optical Class:* Biaxial. *Anisotropism:* Observed.

R<sub>1</sub>–R<sub>2</sub>: (486) 17.5–16.5, (551) 17.2–15.4, (589) 17.1–15.3, (656) 15.4–14.2

**Cell Data:** *Space Group:* n.d.  $a = 3.80$  (2)  $b = 3.79$ (2)  $c = 35.74$ (4)  $\alpha = 90.92^\circ$   
 $\beta = 90.18^\circ$   $\gamma = 90^\circ$   $Z = 6$

**X-ray Powder Pattern:** Mt. Vasin-Myl'k, Russia.

3.01 (10b), 1.844 (9b), 1.573 (8), 2.429 (5), 1.004 (5), 1.360 (4), 3.98 (3)

**Chemistry:**

	(1)
Nb <sub>2</sub> O <sub>5</sub>	1.36
Ta <sub>2</sub> O <sub>5</sub>	98.28
TiO <sub>2</sub>	0.08
Total	99.72

(1) Mt. Vasin-Myl'k, Russia; by electron microprobe, corresponding to (Ta<sub>1.95</sub>Nb<sub>0.04</sub>)<sub>Σ=1.99</sub>O<sub>5</sub>.

**Occurrence:** In a granite pegmatite cutting amphibolites (Mt. Vasin-Myl'k, Russia); in a highly fractionated pegmatite (Animikie Red Ace pegmatite, Wisconsin, USA).

**Association:** Microlite, stibiotantalite, holtite (Mt. Vasin-Myl'k, Russia); manganotantalite, wodginite, tantalian manganotantalite, elbaite (Animikie Red Ace pegmatite, Wisconsin, USA).

**Distribution:** From Mt. Vasin-Myl'k, Voron'i massif, Kola Peninsula, Russia. In the Animikie Red Ace pegmatite, Pine River, Florence Co., Wisconsin, USA.

**Name:** For TANTalium in the composition.

**Type Material:** Geology Museum, Kola Branch, Academy of Sciences, Apatity, 5770; Mining Institute, St. Petersburg, 1683/1; A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia, 82545.

**References:** (1) Voloshin, A.V., Y.A. Pakhomovskii, and G.A. Perlina (1983) Tantite Ta<sub>2</sub>O<sub>5</sub> – a new mineral from granitic pegmatites of the Kola Peninsula. *Mineral. Zhurnal*, 5(3), 90–93 (in Russian with English abs.). (2) (1984) *Amer. Mineral.*, 69, 1193 (abs. ref. 1). (3) Falster, A.U., W.B. Simmons, and K.L. Webber (1993) Niobium-tantalum minerals from the Animikie Red Ace pegmatite, Florence County, Wisconsin. *Geol. Soc. Amer., Abs. with Prog.*, 25, 216 (abs.).