

Crystal Data: Cubic. *Point Group:* $4/m\bar{3}2/m$. Extremely fine grained.

Physical Properties: *Fracture:* [Uneven] (by analogy to the microlite group).
Tenacity: [Brittle.] *Hardness* = < 5.5 *D(meas.)* = n.d. *D(calc.)* = 5.84-6.22

Optical Properties: Semitransparent. *Color:* Greenish white to white; gray in reflected light.
Streak: White.
Optical Class: Isotropic. $n = > 1.9$

Cell Data: *Space Group:* $Fd\bar{3}m$. $a = 10.455(2)$ $Z = 8$

X-ray Powder Pattern: Varuträsk pegmatite, Sweden.
3.01 (10), 3.14 (9), 6.03 (8), 1.575 (8), 2.61 (7), 1.846 (7), 2.010 (5)

Chemistry:	(1)
	Nb ₂ O ₅ 17.54
	Ta ₂ O ₅ 52.65
	Sb ₂ O ₃ 19.24
	CaO 6.78
	<u>Na₂O</u> 2.58
	Total [98.79]

(1) Varuträsk pegmatite, Sweden; by electron microprobe, total Sb as Sb₂O₃, original total given as 98.80%; corresponds to $(\text{Sb}_{0.71}\text{Ca}_{0.65}\text{Na}_{0.45})_{\Sigma=1.81}(\text{Ta}_{1.29}\text{Nb}_{0.71})_{\Sigma=2.00}\text{O}_6\text{O}$. (2) Odd West pegmatite, Canada; analysis not given, corresponds to $(\text{Ca}_{0.71}\text{Sb}_{0.46}\text{Na}_{0.22}\text{Fe}_{0.04}\text{Sn}_{0.03})_{\Sigma=1.46}(\text{Ta}, \text{Nb})_2\text{O}_6\text{O}$.

Mineral Group: Pyrochlore supergroup (general formula - $A_2B_2X_6Y$); microlite group ($B = \text{Ta}^{5+}$).

Occurrence: A very rare mineral, replacing stibiotantalite, in the lithium-rich albite unit of a complex granite pegmatite (Varuträsk pegmatite, Sweden).

Association: Stibiotantalite, antimony, allemontite, lithiophilite, alkalic beryl, cassiterite, columbite-tantalite, microlite (Varuträsk pegmatite, Sweden); cassiterite (Odd West pegmatite, Canada).

Distribution: In the Varuträsk pegmatite, 15 km northwest of Skellefteå, Västerbotten, Sweden. Reported at the Odd West pegmatite, southeastern Manitoba, Canada.

Name: For a member of the *microlite* group with prefixes to indicate essential oxygen (*oxy*) in the *Y* site and essential Sb³⁺ (*stibio*) in the *A* site. Formerly 'stibiomicrolite'.

Type Material: Swedish Museum of Natural History, Stockholm, Sweden (600200); University of Manitoba, Winnipeg, Canada (M6134).

References: (1) Groat, L.A., P Černý, and T.S. Ercit (1987) Reinstatement of stibiomicrolite as a valid species. *Geol. Fören. Förhandl.* Stockholm, 109, 105-109. (2) (1988) *Amer. Mineral.*, 73, 1499 (abs. ref. 1). (3) Atencio, D., M.B. Andrade, A.G. Christy, R. Gieré, and P.M. Kartashov (2010) The pyrochlore supergroup of minerals: nomenclature. *Can. Mineral.*, 48, 673-698.