

Kenoplumbomicrolite**Crystal Data:** Cubic. *Point Group:* $4/m\bar{3}2/m$. As octahedral or cuboctahedral crystals to 20 cm.**Physical Properties:** *Cleavage:* None. *Tenacity:* Brittle. *Fracture:* Uneven. Hardness = ~6 VHN = 610 (40 g load). *D(meas.)* = 7.310-7.832 (with uraninite inclusions) *D(calc.)* = 7.122**Optical Properties:** Translucent. *Color:* Yellowish brown. *Streak:* White. *Luster:* Greasy. *Optical Class:* Isotropic.R: (470) 18.62 (6.61)_{oil}, (546) 17.62 (5.88)_{oil}, (589) 17.26 (5.62)_{oil}, (650) 16.90 (16.90)_{oil}**Cell Data:** *Space Group:* $Fd\bar{3}m$. *a* = 10.571(1) *Z* = 8**X-Ray Diffraction Pattern:** Mt. Ploskaya, Kola Peninsula, Murmanskaja Oblast, Russia.

3.050 (100), 2.641 (42), 1.869 (26), 1.595 (23), 2.425 (9), 1.527 (9), 2.033 (6)

Chemistry:	(1)	(2)
Na ₂ O	0.37	–
CaO	2.51	–
PbO	45.39	46.05
UO ₂	1.24	–
Ta ₂ O ₅	28.58	29.95
Nb ₂ O ₅	12.90	14.85
TiO ₂	0.84	0.49
SiO ₂	2.19	–
SnO ₂	3.47	4.27
Fe ₂ O ₃	1.28	1.34
Al ₂ O ₃	0.07	–
WO ₃	–	2.88
MnO	–	0.10
H ₂ O	[0.35]	–
Total	99.19	99.93

(1) Mt. Ploskaya, Kola Peninsula, Murmanskaja Oblast, Russia; average electron microprobe analysis, H₂O calculated from structure; corresponds to $A(\text{Pb}_{1.30}\square_{0.30}\text{Ca}_{0.29}\text{Na}_{0.08}\text{U}_{0.03})_{\Sigma=2.00} B(\text{Ta}_{0.82}\text{Nb}_{0.62}\text{Si}_{0.23}\text{Sn}^{4+}_{0.15}\text{Ti}_{0.07}\text{Fe}^{3+}_{0.10}\text{Al}_{0.01})_{\Sigma=2.00} X\text{O}_6^Y[\square_{0.52}(\text{OH})_{0.25}\text{O}_{0.23}]_{\Sigma=1.00}$. (2) Do.; average electron microprobe analysis, OH⁻ calculated from structure; corresponds to $A(\text{Pb}_{1.33}\square_{0.66}\text{Mn}_{0.01})_{\Sigma=2.00} B(\text{Ta}_{0.87}\text{Nb}_{0.72}\text{Sn}^{4+}_{0.18}\text{Fe}^{3+}_{0.11}\text{W}_{0.08}\text{Ti}_{0.04})_{\Sigma=2.00} X\text{O}_6^Y[\square_{0.80}(\text{OH})_{0.10}\text{O}_{0.10}]_{\Sigma=1.00}$.

Mineral Group: Pyrochlore supergroup, microlite group.**Occurrence:** In an ‘amazonite’ pegmatite vein in an alkaline granite pluton.**Association:** Quartz, biotite, microcline, zinnwaldite, anglesite, bastnäsité-(Ce), bismite, bismuth, bismuthinite, bismuthite, cassiterite, caysichite-(Y), churchite-(Y), columbite-(Mn), emplectite, fergusonite-(Y), fluorite, gadolinite-(Y), gahnite, galena, hingganite-(Y), hingganite-(Yb), kainosite-(Y), kamphaugite-(Y), kasolite, keiviite-(Y), keiviite-(Yb), kuliokite-(Y), lanarkite, leadhillite, löllingite, monazite-(Ce), pyromorphite, scotlandite, sillénite, sphalerite, tenerite-(Y), thalénite-(Y), thorite, uraninite, vyuntspakhkite-(Y), wulfenite, xenotime-(Y), xenotime-(Yb), zavaritskite.**Distribution:** From Mt. Ploskaya, Western Keivy Massif, Kola Peninsula, Murmanskaja Oblast, Northern Region, Russia.**Name:** The first prefix, *keno*, indicates dominant vacancy at the *Y* site, the second prefix, *plumbo*, indicates the dominant lead in the *A* site of a member of the *microlite* subgroup.**Type Material:** Geological Museum, University of de São Paulo, Brazil (DR980).**References:** (1) Atencio, D., M.B. Andrade, L. Bindi, P. Bonazzi, M. Zoppi, C.J. Stanley, and R. Kristiansen (2018) Kenoplumbomicrolite, (Pb, □)₂Ta₂O₆[□, (OH), O], a new mineral from Ploskaya, Kola Peninsula, Russia. *Mineral. Mag.*, 82, 1049-1055. (2) (2021) *Amer. Mineral.*, 106, 1187-1189 (abs. ref. 1).