

Crystal Data: Tetragonal. *Point Group:* 4/m 2/m 2/m. Crystals equant to stubby prismatic, to 4 mm; in aggregates.

Physical Properties: *Cleavage:* {100} and {001}, perfect. *Hardness* = 4.5
D(meas.) = 2.86(6) D(calc.) = 2.89

Optical Properties: Semitransparent. *Color:* Colorless, light brown, pale rose.
Streak: White. *Luster:* Vitreous.
Optical Class: Uniaxial (+). $\omega = 1.780(3)$ $\epsilon = 1.988(3)$

Cell Data: *Space Group:* P4₂/mcm. $a = 7.819(2)$ $c = 12.099(4)$ $Z = 2$

X-ray Powder Pattern: Khibiny massif, Russia.

7.84 (100), 6.02 (100), 3.25 (80), 2.003 (70), 2.608 (60), 3.36 (50), 2.805 (50)

Chemistry:	(1)	(1)
SiO ₂	17.80	CaO 0.05
TiO ₂	46.68	SrO 0.96
ZrO ₂	0.08	BaO 0.58
Ce ₂ O ₃	0.12	Na ₂ O 10.79
Fe ₂ O ₃	0.16	K ₂ O 4.93
Nb ₂ O ₅	5.05	H ₂ O 11.7
Ta ₂ O ₅	0.05	Total 98.95

(1) Khibiny massif, Russia; by electron microprobe, average of three analyses, H₂O by TGA; corresponds to K_{0.68}Na_{2.28}Sr_{0.06}Ba_{0.02}Ca_{0.01}(Ti_{3.82}Nb_{0.25}Fe_{0.01})_{Σ=4.08}Si_{1.94}O₁₃[(OH)_{0.54}O_{0.46}]_{Σ=1.00}•3.98H₂O.

Occurrence: In hydrothermally altered portions of alkalic pegmatites in a differentiated alkalic massif.

Association: Nepheline, natrolite, aegirine, microcline, apatite, vinogradovite.

Distribution: On Mts. Kukisvumchorr and Yukspor, Khibiny massif, Kola Peninsula, Russia.

Name: For Silicon; Titanium; sodium, NAtrium; and potassium, Kalium, in its composition.

Type Material: Geology Museum, Kola Branch, Academy of Sciences, Apatity, ining Institute, St. Petersburg, Russia, 2021/1; The Natural History Museum, London, England, 1994,31.

References: (1) Menshikov, Y.P., E.V. Sokolova, Y.K. Yegorov-Tismenko, A.P. Khomyakov, and L.I. Polezhaeva (1992) Sitinakite Na₂KTi₄Si₂O₁₃(OH)•4H₂O – a new mineral. Zap. Vses. Mineral. Obshch., 121(1), 94–99. (2) (1994) Mineral. Abs., 45, 241 (abs. ref. 1).