

Crystal Data: Monoclinic, pseudo-hexagonal. *Point Group:* 2/*m*. As irregular grains, to 3 mm, in small ovoids zoned with eudialyte.

Physical Properties: Hardness = 4.5–5.5 D(meas.) = 3.40 D(calc.) = 3.33

Optical Properties: Translucent. *Color:* Pale yellowish to white. *Luster:* Dull or greasy. *Optical Class:* Biaxial (-). $\alpha = 1.665$ $\beta = 1.715$ $\gamma = 1.715$ $2V(\text{meas.}) = 6^\circ\text{--}16^\circ$

Cell Data: *Space Group:* B2/*m* (synthetic). $a = 19.188$ $b = 14.072$ $c = 11.075$
 $\gamma = 117^\circ 04'$ $Z = 16$

X-ray Powder Pattern: Khibiny massif, Russia.

2.76 (100), 2.95 (70), 1.630 (65), 2.133 (50), 1.381 (50), 1.252 (45), 1.595 (40)

Chemistry:	(1)
	SiO ₂ 33.8
	TiO ₂ 0.6
	ZrO ₂ 37.8
	CaO trace
	K ₂ O 27.0
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	Total 99.2

(1) Khibiny massif, Russia; by electron microprobe, corresponds to K_{1.98}(Zr_{1.06}Ti_{0.03})_{Σ=1.09}Si_{1.94}O_{7.05}.

Occurrence: In aegirine-rich metasomatic rocks in a differentiated alkalic massif.

Association: Eudialyte, zircon.

Distribution: From the Khibiny massif, in the Hackmann Valley, Kola Peninsula, Russia.

Name: For the locality in the Khibiny massif, Kola Peninsula, Russia.

Type Material: Geology Museum, Kola Branch, Academy of Sciences, Apatity, 5089; Mining Institute, St. Petersburg, 1078/1; Institute of Mineralogy and Geochemistry of Rare Elements, Moscow; A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia, 76326–76328; National School of Mines, Paris, France; The Natural History Museum, London, England, 1994,11.

References: (1) Khomyakov, A.P. and A.A. Voronkov (1973) New zirconium silicates in the Lovozero and Khibina massifs. *Trudy Mineral. Muzeya Akad. Nauk SSSR*, 22, 215–217 (in Russian). (2) (1974) *Amer. Mineral.*, 59, 1140 (abs. ref. 1). (3) Khomyakov, A.P., A.A. Voronkov, S.I. Lebedeva, V.P. Bykov, and K.V. Yurkiva (1974) Khibinskite, K₂ZrSi₂O₇, a new mineral. *Zap. Vses. Mineral. Obshch.*, 103, 110–116 (in Russian). (4) (1975) *Amer. Mineral.*, 60, 340 (abs. ref. 3). (5) Nosyrev, N.A., E.N. Treushnikov, A.A. Voronkov, V.V. Ilyukhin, R.M. Ganiev, and N.V. Belov (1976) Crystal structure of synthetic khibinskite. *Doklady Acad. Nauk SSSR*, 231, 1351–1353 (in Russian). (6) (1977) *Chem. Abs.*, 86, 64045 (abs. ref. 5).