

Crystal Data: Tetragonal. *Point Group:* 4/m 2/m 2/m. As rosettelike intergrowths and grains.

Physical Properties: *Cleavage:* Perfect on {001}, distinct on {100}. *Hardness* = 3–4
D(meas.) = n.d. D(calc.) = 3.15

Optical Properties: Transparent to translucent. *Color:* Yellow-green to greenish gray.
Luster: Vitreous to adamantine.

Optical Class: Uniaxial (-). $\omega = 1.756(2)$ $\epsilon = 1.680(2)$

Cell Data: *Space Group:* P4/nmm. $a = 6.50(1)$ $c = 5.07(1)$ $Z = 2$

X-ray Powder Pattern: Lovozero massif, Russia.
2.709 (100), 5.05 (80), 1.689 (70), 2.349 (60), 1.1001 (60), 3.96 (50), 1.611 (50)

Chemistry:	(1)	(2)
SiO ₂	29.77	29.14
TiO ₂	38.93	39.62
Nb ₂ O ₅	0.72	0.18
Ta ₂ O ₅	0.12	
FeO	0.52	1.35
MnO	0.31	0.37
Na ₂ O	30.32	29.47
Total	100.69	100.13

(1) Lovozero massif, Russia; by electron microprobe, average of analyses of four grains; corresponding to Na_{1.99}(Ti_{0.99}Mn_{0.01}Fe_{0.01}Nb_{0.01})_{Σ=1.02}Si_{1.01}O₅. (2) Do.; by electron microprobe.

Polymorphism & Series: Dimorphous with paranatisite.

Occurrence: In natrolite-ussingite veins cutting alkalic rocks in a differentiated alkalic massif.

Association: Chkalovite, aegirine, vuonnemite.

Distribution: On Mt. Karnasurt, Lovozero massif, Kola Peninsula, Russia.

Name: For sodium, NAtrium, TITanium, and SIlicon in the composition.

Type Material: Geology Museum, Kola Branch, Academy of Sciences, Apatity, 3393; A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia; The Natural History Museum, London, England, 1994,16.

References: (1) Men'shikov, Y.P., Y.A. Pakhomovskii, E.A. Goiko, I.V. Bussen, and A.N. Mer'kov (1975) A natural tetragonal titanosilicate of sodium, natisite. *Zap. Vses. Mineral. Obshch.*, 104, 314–317 (in Russian). (2) (1976) *Amer. Mineral.*, 61, 339 (abs. ref. 1). (3) Khomyakov, A.P., L.I. Polezhaeva, and E.V. Sokolova (1992) Paranatisite Na₂TiSiO₅ – a new mineral. *Zap. Vses. Mineral. Obshch.*, 121(6), 133–136 (in Russian).