

**Crystal Data:** Monoclinic. *Point Group:* 2/m. As divergent prismatic on [100] or lamellar on {010} crystals to 1 mm, in chaotic groups to 2 cm or radial-lamellar clusters.

*Twinning:* Polysynthetic on {010}.

**Physical Properties:** *Cleavage:* Perfect on (010) and (001). *Tenacity:* Flexible, inelastic.

*Fracture:* Splintery. Hardness = ~2 D(meas.) = 1.90(2) D(calc.) = 1.92

**Optical Properties:** Transparent to translucent. *Color:* Colorless. *Streak:* White.

*Luster:* Vitreous.

*Optical Class:* Biaxial (-).  $\alpha = 1.474(2)$   $\beta = 1.479(2)$   $\gamma = 1.482(2)$   $2V(\text{meas.}) > 70^\circ$

$2V(\text{calc.}) = 75^\circ$  *Orientation:*  $X \wedge a \approx 15^\circ$ ,  $Y = c$ ,  $Z = b$ . *Dispersion:* Weak,  $r < v$ . Nonpleochroic.

**Cell Data:** *Space Group:*  $P2_1/c$ .  $a = 9.8744(4)$   $b = 12.3981(5)$   $c = 14.8973(7)$   $\beta = 104.675(5)^\circ$   $Z = 4$

**X-ray Powder Pattern:** Palitra pegmatite, Mt. Kedykverpakhk, Kola Peninsula, Russia.

3.116 (100), 6.21 (72), 7.21 (70), 4.003 (49), 3.734 (46), 4.696 (44), 2.463 (38)

Chemistry:	(1)	(2)
Na <sub>2</sub> O	23.28	23.545
SiO <sub>2</sub>	45.45	45.65
H <sub>2</sub> O	[31.27]	30.805
Total	100.00	100.000

(1) Palitra pegmatite, Mt. Kedykverpakhk, Kola Peninsula, Russia; average electron microprobe analysis supplemented by IR spectroscopy, H<sub>2</sub>O by difference and for charge balance; corresponds to Na<sub>3.98</sub>Si<sub>4.01</sub>O<sub>8.02</sub>(OH)<sub>3.98</sub>·7.205H<sub>2</sub>O. (2) Na<sub>4</sub>[Si<sub>4</sub>O<sub>8</sub>(OH)<sub>4</sub>]·7H<sub>2</sub>O.

**Mineral Group:** Carpholite group.

**Occurrence:** Late hydrothermal, low temperature paragenesis in peralkaline pegmatite.

**Association:** Revdite, megacyclite, natrosilite, microcline, villiaumite.

**Distribution:** From the Palitra pegmatite, Mt. Kedykverpakhk, Lovozero alkaline massif, Kola Peninsula, Russia.

**Name:** Honors Russian crystallographer and crystal-chemist Yurii Kavdievich *Yegorov*-Tismenko (1938-2007), Faculty of Geology, Moscow State University.

**Type Material:** A.E. Fersman Mineralogical Museum, RAS, Moscow, Russia (3729/1).

**References:** (1) Pekov, I.V., N.V. Zubkova, N.V. Chukanov, A.E. Zadov, V.G. Grishin, and D.Yu. Pushcharovsky (2010) Yegorovite, Na<sub>4</sub>[Si<sub>4</sub>O<sub>8</sub>(OH)<sub>4</sub>]·7H<sub>2</sub>O - a new mineral from the Lovozero alkaline pluton, Kola Peninsula. *Geology of Ore Deposits*, 52(7), 584-590. (2) Zubkova, N.V., I.V. Pekov, D.Yu. Pushcharovskii, and S.S. Kazantsev (2009) Crystal structure of yegorovite Na<sub>4</sub>[Si<sub>4</sub>O<sub>8</sub>(OH)<sub>4</sub>]·7H<sub>2</sub>O. *Doklady Earth Sciences*, 427, 814-818.