

**Crystal Data:** Monoclinic. *Point Group:* *m*. *Twinning:* Microtwinning on (001) and  $\bar{4}$  01). As flattened prismatic crystals elongated along [010] to 8 mm.

**Physical Properties:** *Cleavage:* None. *Fracture:* Uneven. *Tenacity:* Brittle. *Hardness* = 5  
D(meas.) = 2.90 D(calc.) = 2.93

**Optical Properties:** Transparent. *Color:* White, pale brown, colorless. *Streak:* White.  
*Luster:* Vitreous.

*Optical Class:* Biaxial (+).  $\alpha = 1.680(1)$   $\beta = 1.687(2)$   $\gamma = 1.787(5)$   $2V(\text{meas.}) = 25(10)^\circ$   
 $2V(\text{calc.}) = 31^\circ$  *Orientation:*  $Y = b$ . Nonpleochroic. No dispersion.

**Cell Data:** *Space Group:* *Cm*.  $a = 14.495(10)$   $b = 13.945(10)$   $c = 7.838(8)$   $\beta = 117.75(7)^\circ$   $Z = 2$

**X-ray Powder Pattern:** Mt. Lepkhe-Nelm, Lovozero alkaline massif, Kola Peninsula, Russia.  
6.96 (100), 3.11 (90), 3.21 (80), 2.50 (40), 1.70 (40), 2.60 (35), 1.74 (30)

<b>Chemistry:</b>	(1)
Na <sub>2</sub> O	2.04
K <sub>2</sub> O	2.43
CaO	1.48
SrO	4.49
BaO	3.65
MgO	0.04
MnO	0.11
FeO	0.22
ZnO	5.02
Al <sub>2</sub> O <sub>3</sub>	0.15
SiO <sub>2</sub>	39.33
TiO <sub>2</sub>	18.89
Nb <sub>2</sub> O <sub>5</sub>	12.57
<u>H<sub>2</sub>O</u>	<u>11.1</u>
Total	101.42

(1) Mt. Lepkhe-Nelm, Lovozero massif, Kola Peninsula, Russia; average of 8 electron microprobe analyses, H<sub>2</sub>O by TGA; corresponding to (Na<sub>0.68</sub>Ca<sub>0.32</sub>) $\Sigma=1.00$ (Sr<sub>0.53</sub>Na<sub>0.12</sub>) $\Sigma=0.65$ (K<sub>0.63</sub>Ba<sub>0.29</sub>) $\Sigma=0.92$ (Zn<sub>0.75</sub>Fe<sub>0.04</sub>Mn<sub>0.02</sub>Mg<sub>0.01</sub>) $\Sigma=0.82$ (Ti<sub>2.88</sub>Nb<sub>1.15</sub>) $\Sigma=4.03$ (Si<sub>7.96</sub>Al<sub>0.04</sub>) $\Sigma=8$ O<sub>24</sub>[O<sub>2.58</sub>(OH)<sub>1.42</sub>] $\Sigma=4$ ·6.80H<sub>2</sub>O.

**Mineral Group:** Labuntsovite group.

**Occurrence:** In cavities in eudialyte-aegirine-feldspar pegmatite in an alkaline massif.

**Association:** Lamprophyllite, natrolite, halloysite, ranciéite, kuzmenkoite-Zn, tsepinite-Na.

**Distribution:** At Mt. Lepkhe-Nelm, Lovozero alkaline massif, Kola Peninsula, Russia.

**Name:** Honors Russian geologist Aleksey S. *Sakharov* (1910-1996) for his study of the Lovozero alkaline massif and a suffix indicates the predominance of Zn in the D structural site.

**Type Material:** A.E. Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia.

**References:** (1) Pekov, I.V., N.V. Chukhanov, A.E. Zadov, K.A. Rozenberg, and R.K. Rastsvetaeva (2003) Alsakharovite-Zn, NaSrKZn(Ti, Nb)<sub>4</sub>[Si<sub>4</sub>O<sub>12</sub>]<sub>2</sub>(O, OH)<sub>4</sub>·7H<sub>2</sub>O, a new mineral of the labuntsovite group from the Lovozero massif, Kola Peninsula. *Zapiski Vseross. Mineral. Obsch.*, 132(1), 52-58 (in Russian, English abs.). (2) Rozenberg, K.A., R.K. Rastsvetaeva, I.V. Pekov, and N.V. Chukhanov (2002) New zinc-rich representative of the labuntsovite group: crystal structure and microtwinning. *Doklady Chemistry*, 383(4-6), 110-113. (3) (2004) *Amer. Mineral.*, 89(5-6), 894 (abs. refs. 1 & 2).