

Crystal Data: Hexagonal. *Point Group:* 6. As wedge shaped prismatic crystals to 0.5 mm in rosettes to 3 mm.

Physical Properties: *Cleavage:* Moderate on {h00} and {001}. *Tenacity:* Brittle.
Fracture: Stepped to hackly. Hardness = 7 D(meas.) = 2.85(2)-2.90(2) D(calc.) = 2.922

Optical Properties: Translucent (turbid) to transparent. *Color:* White with creamy rose tint, pale rose or greenish blue. *Streak:* White. *Luster:* Vitreous, spherulites are pearly or silky.
Optical Class: Uniaxial (-). $\epsilon = 1.582(2)$ $\omega = 1.591(2)$

Cell Data: *Space Group:* P6₃. $a = 13.8964(4)$ $c = 7.7001(2)$ $Z = 18$

X-ray Powder Pattern: Mt. Karnasurt, Lovozero massif, Kola Peninsula, Russia.
2.780 (100), 2.216 (90), 2.320 (70), 1.721 (70), 3.86 (60) 3.61 (60), 1.928 (50)

Chemistry:	(1)	(2)
SiO ₂	47.83	47.73
B ₂ O ₃	26.88	27.65
K ₂ O	0.00	
<u>Na₂O</u>	<u>24.36</u>	<u>47.83</u>
Total	99.07	100.00

(1) Mt. Karnasurt, Lovozero massif, Kola Peninsula, Russia; average electron microprobe analysis supplemented by IR spectroscopy; corresponds to Na_{1.00}B_{0.98}Si_{1.01}O₄. (2) NaBSiO₄.

Mineral Group: Zeolite group.

Occurrence: In a cavity in the ussingite-rich core of a hyperagpaitic pegmatite.

Association: Ussingite, chkalovite, nordite, gerasimovskite, neptunite.

Distribution: From Mt. Karnasurt [TL] and Mt. Alluaiv, Lovozero massif, Kola Peninsula, Russia. At Mont Saint-Hilaire, Quebec, Canada.

Name: Honors Russian specialist in boron minerals, Svetlana V. *Malinko* (b. 1927).

Type Material: A.E. Fersman Mineralogical Museum, Moscow, Russia.

References: (1) Khomyakov, A.P., G.N. Nechelyustov, E.V. Sokolova, and F.C. Hawthorne (2000) The new borosilicates malinkoite, NaBSiO₄, and lisitsynite, KBSi₂O₆, from the alkaline pegmatites of the Khibiny-Lovozero complex (Kola Peninsula). *Zapiski Vseross. Mineral. Obshch.*, 129(6), 35-42 (in Russian, English abs.). (2) (2002) *Amer. Mineral.*, 87, 181 (abs. ref. 1). (3) Sokolova, E.V., F.C. Hawthorne, and A.P. Khomyakov (2001) The crystal chemistry of malinkoite, NaBSiO₄, and lisitsynite, KBSi₂O₆, from the Khibina-Lovozero massif, Kola Peninsula, Russia. *Can. Mineral.*, 39(1), 159-169. (4) Graetsch, H.A. and W. Schreyer (2005) Rietveld refinement of synthetic monoclinic NaBSiO₄. *Can. Mineral.*, 43(2), 759-767.