

**Crystal Data:** Orthorhombic. *Point Group:* 222. As aggregates to 10 mm of aligned, thin crystals, to 5 mm, platy on {001}, modified by {100}, {010}, and {111}.

**Physical Properties:** *Cleavage:* Good on {110} and {001}. *Tenacity:* Brittle. *Fracture:* Uneven. Hardness = 5-6 D(meas.) = 2.16(2) D(calc.) = 2.21 Nonfluorescent.

**Optical Properties:** Transparent. *Color:* Colorless. *Streak:* White. *Luster:* Vitreous. *Optical Class:* Biaxial (-).  $\alpha = 1.499(1)$   $\beta = 1.507(1)$   $\gamma = 1.511(1)$   $2V(\text{meas.}) = 65(5)^\circ$   $2V(\text{calc.}) = 70^\circ$  *Orientation:*  $X = a, Y = c, Z = b$ .

**Cell Data:** *Space Group:* P2<sub>1</sub>2<sub>1</sub>2<sub>1</sub>.  $a = 9.722(1)$   $b = 10.142(1)$   $c = 12.030(1)$   $Z = 4$

**X-ray Powder Pattern:** Kvanefjeld Plateau, Ilímaussaq complex, South Greenland. 5.97 (100), 6.11 (80b), 3.09 doublet (70), 2.988 doublet (60), 3.06 (50), 3.46 (45), 5.07 (35)

<b>Chemistry:</b>	(1)
Na <sub>2</sub> O	13.8
K <sub>2</sub> O	0.34
BeO	[6.26]
CaO	0.13
SiO <sub>2</sub>	62.4
H <sub>2</sub> O	[18.05]
Total	100.98

(1) Kvanefjeld Plateau, Ilímaussaq complex, South Greenland; average electron microprobe and SEM EDS analyses, H<sub>2</sub>O and BeO calculated; corresponds to (Na<sub>1.74</sub>K<sub>0.03</sub>Ca<sub>0.01</sub>)<sub>Σ=1.78</sub>Be<sub>0.98</sub>Si<sub>4.06</sub>O<sub>10</sub>·3.92H<sub>2</sub>O.

**Mineral Group:** Zeolite group.

**Occurrence:** In albite-lined cavities within tugtupite-bearing albitites.

**Association:** Gmelinite, neptunite, analcime, gonnardite, lovdarite.

**Distribution:** On the Kvanefjeld Plateau, northwestern extremity of the Ilímaussaq complex, South Greenland.

**Name:** Comprised of the chemical symbols of the mineral's three essential cations - Na, Be, Si.

**Type Material:** Geological Museum, Copenhagen, Denmark, and the Natural History Museum, Vienna, Austria.

**References:** (1) Petersen, O.V., G. Giester, F. Brandstätter, and G. Niedermayr (2002) Nabesite, Na<sub>2</sub>BeSi<sub>4</sub>O<sub>10</sub>·4H<sub>2</sub>O, a new mineral species from the Ilímaussaq alkaline complex, South Greenland. *Can. Mineral.*, 40(1), 173-181. (2) (2003) *Amer. Mineral.*, 88, 252 (abs. ref. 1). (3) Armstrong, J.A., H. Friis, A. Lieb, A.A. Finch, and M.T. Weller (2010) Combined single-crystal X-ray and neutron powder diffraction structure analysis exemplified through full structure determinations of framework and layer beryllate minerals. *Amer. Mineral.*, 95, 519-526.