Beryllite $Be_3SiO_4(OH)_2 \cdot H_2O$

Crystal Data: Orthorhombic or monoclinic. *Point Group:* n.d. As fine spherulites, to 3 mm; as drusy segregations and fibrous crusts; powdery masses and coatings on other minerals.

Physical Properties: Hardness = 1 in aggregate. D(meas.) = 2.196 D(calc.) = n.d.

Optical Properties: Transparent. *Color:* White. *Luster:* Silky.
Optical Class: Biaxial (–). $\alpha = 1.50–1.544$ $\beta = 1.553(2)$ $\gamma = 1.52–1.562$ 2V(meas.) = $< 45°$

Cell Data: *Space Group:* n.d. Z = n.d.

X-ray Powder Pattern: Lovozero massif, Russia.
4.01 (100), 2.34 (100), 3.64 (90), 1.351 (80), 3.39 (70), 3.19 (70), 2.90 (70)

Chemistry:

	(1)	(2)
SiO_2	34.10	35.11
TiO_2	trace	
Al_2O_3	1.63	
Fe_2O_3	0.12	
BeO	40.00	43.84
MgO	trace	
CaO	0.50	
Na_2O	2.42	
H_2O^+	18.95	21.05
H_2O^-	3.25	
Total	100.97	100.00

(1) Lovozero massif, Russia. (2) $Be_3SiO_4(OH)_2 \cdot H_2O$.

Occurrence: In the center of a zoned pegmatite cutting arfvedsonite-bearing nepheline syenite (Lovozero massif, Russia); in analcime-rich veins (Ilímaussaq intrusion, Greenland).

Association: Albite, epididymite, bertrandite, natrolite, sodalite (Lovozero massif, Russia); analcime, sørensenite, chkalovite, epididymite, tugtupite (Ilímaussaq intrusion, Greenland).

Distribution: From the Natrolite Stock pegmatite, Mt. Karnasurt, Lovozero massif, Kola Peninsula, Russia. At Kvanefjeld and on the Taseq slope, in the Ilímaussaq intrusion, southern Greenland.

Name: In allusion to the BERYLLium in its composition.

Type Material: A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia, 57361.

References: (1) Kuz'menko, M.V. (1954) Berillite [beryllite] – a new mineral. Doklady Acad. Nauk SSSR, 99, 51–454 (in Russian). (2) (1955) Amer. Mineral., 40, 787–788 (abs. ref. 1). (3) Vlasov, K.A., Ed. (1966) Mineralogy of rare elements, v. II, 96–98. (4) Andersen, S. (1967) On beryllite and bertrandite from the Ilímaussaq alkaline intrusion, South Greenland. Medd. Grønland, 181(4), 11–26.