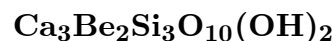


Aminoffite



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Crystal Data: Tetragonal. *Point Group:* 4/*m*. As small, euhedral, pyramidal crystals, to 1 mm. *Twinning:* Commonly twinned, polysynthetically on {001}.

Physical Properties: *Cleavage:* Poor on {001}. *Fracture:* Conchoidal. *Tenacity:* Brittle. Hardness = 5.5–6 D(meas.) = 2.94 D(calc.) = 2.86 Strongly piezoelectric.

Optical Properties: Transparent. *Color:* Colorless to light yellowish. *Luster:* Vitreous. *Optical Class:* Uniaxial (–); may be abnormally biaxial. $\omega = 1.647$ $\epsilon = 1.637$

Cell Data: *Space Group:* $P4_2/n$. $a = 9.865(2)$ $c = 9.930(2)$ $Z = 4$

X-ray Powder Pattern: Långban, Sweden.

2.614 (100), 2.84 (90), 4.02 (80), 2.141 (80), 6.97 (70), 4.40 (70), 3.48 (70)

Chemistry:

	(1)	(2)
SiO ₂	42.49	43.28
Al ₂ O ₃	4.41	
Fe ₂ O ₃	0.31	
MnO	0.19	
BeO	6.20	12.01
CaO	40.27	40.39
H ₂ O	6.45	4.32
Total	[100.32]	100.00

(1) Långban, Sweden; original total given as 100.33%. (2) Ca₃Be₂Si₃O₁₀(OH)₂.

Occurrence: In cavities in massive magnetite (Långban, Sweden); in fluorite veins at the contact between marbles and “hornblende” granites associated with hastingsite nepheline syenites (Dugdinsk massif, Russia); in fluorite veins in tinguaitite and nephelinite dikes (Bayankolsk dike field, Russia).

Association: Magnetite, goethite (Långban, Sweden); fluorite (Russia).

Distribution: From Långban, Värmland, Sweden. In Russia, found in the Bayankolsk dike field, Tuva, and in the Dugdinsk massif; also in the Lake Baikal area, eastern Siberia. From Hall’s Grampians, eight km northwest of Emmaville, New South Wales, Australia.

Name: To honor Dr. Gregori Aminoff (1883–1947), Swedish mineralogist and expert on Långban mineralogy, associated with the Riksmuseum, Stockholm, Sweden.

Type Material: Harvard University, Cambridge, Massachusetts, 94627, 106916, 106917; National Museum of Natural History, Washington, D.C., USA, 137291, R7823; The Natural History Museum, London, England, 1984,423.

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