

**Crystal Data:** Monoclinic, pseudo-orthorhombic. *Point Group:* 2/m. As columnar crystal aggregates, individual crystals prismatic with nearly square outline, to 12 mm; crystals are striated lengthwise. *Twinning:* Polysynthetic, twin plane {001}, common.

**Physical Properties:** *Cleavage:* Prismatic, possible. *Fracture:* Even. Hardness = 4–5  
D(meas.) = 3.66 D(calc.) = 3.692

**Optical Properties:** Semitransparent. *Color:* Flesh-red; in transmitted light, colorless to slightly reddish in thicker grains. *Luster:* Vitreous, greasy on fracture surfaces.  
*Optical Class:* Biaxial (+) or biaxial (–). *Orientation:* Z = b; X ∧ a = 36°. *Dispersion:* Weak.  
α = 1.462(2) β = 1.466(2) γ = 1.469(2) 2V(meas.) = 78°–80°

**Cell Data:** *Space Group:* P2<sub>1</sub>/c. a = 5.251(3) b = 10.464(5) c = 18.577(9)  
β = 107.53(3)° Z = 4

**X-ray Powder Pattern:** Ivigtut, Greenland.  
3.162 (100), 3.893 (80), 3.96 (65), 3.127 (65), 2.627 (65), 2.878 (50), 2.865 (50)

Chemistry:	(1)		(1)	
	PO <sub>4</sub>	17.63	Mg	0.18
	Al	10.04	Ca	0.20
	Fe	0.06	Na	8.60
	Mn	trace	K	0.15
	Sr	31.89	Li	trace
	Ba	0.35	F	31.70
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			Total	100.80

(1) Ivigtut, Greenland; corresponds to Sr<sub>2.04</sub>Na<sub>2.03</sub>Al<sub>2.01</sub>(PO<sub>4</sub>)<sub>1.00</sub>F<sub>8.97</sub>.

**Occurrence:** A rare mineral within greisen formed at the contact zone of a cryolite ore body.

**Association:** Fluorite, cryolite, sphalerite, pyrite, zircon, chalcocopyrite, galena, molybdenite, albite, muscovite, quartz.

**Distribution:** Found in the Ivigtut cryolite deposit, southern Greenland.

**Name:** Honoring the Danish mineralogist Ove Balthasar Bøggild (1872–1956), Professor of Geology, University of Copenhagen, Copenhagen, Denmark.

**Type Material:** University of Copenhagen, Copenhagen, Denmark, 1857.155a.

**References:** (1) Pauly, H. (1956) Bøggildite, a new phosphate-fluoride from Ivigtut, South Greenland. *Medd. Grønland*, 137(6), 1–17. (2) Møller, C.K. (1956) X-ray investigation of bøggildite. *Medd. Grønland*, 137(6), 1–15. (3) (1956) *Amer. Mineral.*, 41, 959 (abs. refs. 1 and 2). (4) Hawthorne, F.C. (1982) The crystal structure of bøggildite. *Can. Mineral.*, 20, 263–270.