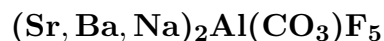


**Stenonite**

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**Crystal Data:** Monoclinic. *Point Group:* 2/*m*. Cleavable, massive, to 4 cm.**Physical Properties:** *Cleavage:* On {001}, {120}, good. Hardness = ~3.5  
D(meas.) = 3.86(7) D(calc.) = 3.847**Optical Properties:** Transparent to translucent. *Color:* White, colorless. *Luster:* Vitreous.  
*Optical Class:* Biaxial (-). *Orientation:* X = b; Z ∧ c = -32°. α = 1.452 β = 1.527  
γ = 1.538 2V(meas.) = 43°**Cell Data:** *Space Group:* P2<sub>1</sub>/*n*. a = 5.450(2) b = 8.704(2) c = 13.050(3)  
β = 98.72(2)° Z = 4**X-ray Powder Pattern:** Ivigtut, Greenland.  
6.97 (s), 1.706 (s), 2.158 (ms), 2.291 (m), 1.747 (m), 1.645 (m), 1.590 (m)

<b>Chemistry:</b>	(1)	(2)
CO <sub>2</sub>	16.00	16.80
Al	7.73	7.55
Ca	0.01	
Sr	47.08	49.06
Ba	1.09	
Na	0.58	
F	27.13	26.59
H <sub>2</sub> O	n.d.	
<hr/>		
Total	99.62	100.00

(1) Ivigtut, Greenland; estimated to contain jarlite 3%. (2) (Sr, Ba, Na)<sub>2</sub>Al(CO<sub>3</sub>)F<sub>5</sub>.**Occurrence:** A rare mineral in the contact zone between siderite–cryolite and fluorite-rich rocks.**Association:** Jarlite, weberite, jørgensonite, thomsenolite, gearksutite, topaz, muscovite, barite, pyrite, siderite, quartz.**Distribution:** From the Ivigtut cryolite deposit, southwestern Greenland.**Name:** Honors Nicholas Stenonis (Steno) (1638–1686), Danish scientist, who determined the constancy of interfacial angles of crystals.**Type Material:** University of Copenhagen, Copenhagen, Denmark, 1965.16–1965.22, 1981.1016–1981.1018, 1981.1021, 1981.1060. Natural History Museum, Paris, France,; The Natural History Museum, London, England, 1966,536.**References:** (1) Pauly, H. (1962) Stenonite, a new carbonate-fluoride from Ivigtut, South Greenland. *Medd. Grønland*, 169(9), 1–24. (2) (1963) *Amer. Mineral.*, 48, 1178 (abs. ref. 1). (3) Hawthorne, F.C. (1984) The crystal structure of stenonite and the classification of the aluminofluoride minerals. *Can. Mineral.*, 22, 245–251.