

**Aërinite**

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**Crystal Data:** Monoclinic. *Point Group:* n.d. As masses of cryptocrystalline fibers; earthy, compact.**Physical Properties:** Hardness =  $\sim 3$  D(meas.) = 2.48(2) D(calc.) = [2.46]**Optical Properties:** Semitransparent. *Color:* Blue to blue-green.*Optical Class:* Biaxial (-). *Pleochroism:* Intense; X = bright blue; Y = Z = pale beige. $\alpha = 1.510(5)$   $\beta = 1.560(5)$   $\gamma = 1.580(5)$  2V(meas.) = n.d. 2V(calc.) = 63°**Cell Data:** *Space Group:* n.d.  $a = 14.690(15)$   $b = 16.872(15)$   $c = 5.170(15)$   $\beta = 94^\circ 45'$   
Z = [2]**X-ray Powder Pattern:** Saint-Pandelon, France.

14.65 (100), 4.050 (80), 2.721 (75), 2.812 (50), 3.798 (35), 3.651 (35), 2.135 (35)

**Chemistry:**

	(1)	(2)
SiO <sub>2</sub>	36.91	37.87
TiO <sub>2</sub>	trace	
Al <sub>2</sub> O <sub>3</sub>	17.20	18.64
Fe <sub>2</sub> O <sub>3</sub>	7.31	
FeO	3.47	7.00
MnO	0.10	
MgO	3.15	6.
CaO	12.03	11.93
Na <sub>2</sub> O	0.27	2.70
K <sub>2</sub> O	0.04	0.12
H <sub>2</sub> O	17.79	15.45
CO <sub>2</sub>	2.30	
P <sub>2</sub> O <sub>5</sub>	0.71	
Total	101.28	99.71

(1) Saint-Pandelon, France; H<sub>2</sub>O by TGA, CO<sub>2</sub> by chromatography; corresponds to (Ca<sub>4.04</sub>Na<sub>0.16</sub>K<sub>0.02</sub>)<sub>Σ=4.22</sub>(Al<sub>6.36</sub>Fe<sub>1.72</sub><sup>3+</sup>Mg<sub>1.47</sub>Fe<sub>0.91</sub><sup>2+</sup>Mn<sub>0.03</sub>)<sub>Σ=10.49</sub>(Si<sub>11.59</sub>P<sub>0.19</sub>)<sub>Σ=11.78</sub>O<sub>35.21</sub>(OH)<sub>12.11</sub>(CO<sub>3</sub>)<sub>0.99</sub>•12.54H<sub>2</sub>O. (2) Morocco.**Occurrence:** A hydrothermal mineral of the zeolite facies, formed at relatively low temperature, in fractures cutting mafic igneous rocks (Saint-Pandelon, France).**Association:** Prehnite, scolecite, mesolite (Saint-Pandelon, France).**Distribution:** At Caserras, Juseu, and Estopiñan, Huesca Province; Tartaren, Lerida Province; and other less-well-defined localities in Spain. From Saint-Pandelon, Landes, France. In Morocco, at Ourika. From the Gunsight Mountains, Pima Co., Arizona, USA.**Name:** From the Greek for *sky blue* for its distinctive color.**Type Material:** Wrocław University, Wrocław, Poland, II-8890; National School of Mines, Paris, France.**References:** (1) Dana, E.S. (1892) Dana's system of mineralogy, (6th edition), 1025. (2) Termier, H. and G. Termier (1946) Sur la presence d'aërinite au Maroc. Compt. Rend. Soc. Géol. France, 78-80 (in French). (3) (1948) Chem. Abs., 42, 7204 (abs. ref. 2). (4) Azambre, B. and P. Monchoux (1988) Précisions minéralogiques sur l'aërinite: nouvelle occurrence à Saint-Pandelon (Landes, France). Bull. Minéral., 111, 39-47 (in French with English abs.).

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