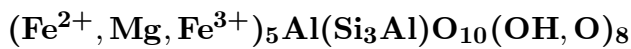


**Orthochamosite**

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**Crystal Data:** Orthorhombic, pseudo-hexagonal. *Point Group:*  $3m$  (pseudo-hexagonal).  
Fine-grained.**Physical Properties:** Hardness =  $\sim 2$   $D(\text{meas.}) = 3.078$   $D(\text{calc.}) = \text{n.d.}$ **Optical Properties:** Translucent. *Color:* Pale green.  
*Optical Class:* [Biaxial.]  $n = 1.640\text{--}1.650$   $2V(\text{meas.}) = \text{n.d.}$ **Cell Data:** *Space Group:*  $C3m$  (pseudo-hexagonal).  $a = 5.355$   $b = 9.293$   $c = 7.043$   
 $Z = 1$ **X-ray Powder Pattern:** Ayrshire, Scotland.  
7.04 (10), 3.513 (10), 2.514 (9), 1.552 (7), 2.137 (6), 2.673 (4), 1.765 (4)

<b>Chemistry:</b>	(1)		(1)	
	SiO <sub>2</sub>	22.03	Na <sub>2</sub> O	0.08
	TiO <sub>2</sub>	3.63	K <sub>2</sub> O	0.03
	Al <sub>2</sub> O <sub>3</sub>	22.91	H <sub>2</sub> O <sup>+</sup>	10.65
	Fe <sub>2</sub> O <sub>3</sub>	0.46	H <sub>2</sub> O <sup>-</sup>	0.63
	Cr <sub>2</sub> O <sub>3</sub>	0.05	CO <sub>2</sub>	0.40
	FeO	36.68	P <sub>2</sub> O <sub>5</sub>	0.18
	MnO	0.04	SO <sub>3</sub>	0.27
	MgO	1.91	org.	0.03
	CaO	0.07	Total	100.05

(1) Ayrshire, Scotland.

**Polymorphism & Series:** Dimorphous with chamosite.**Mineral Group:** Chlorite group.**Occurrence:** In a lateritic clay derived from the alteration of olivine basalts (Ayrshire, Scotland).**Association:** Siderite, clay minerals.**Distribution:** From coalfields in Ayrshire, Scotland. At Kaňk, near Kutna Hora, Czech Republic. From Sainte-Barbe, Meurthe-et-Moselle, France. In Sweden, at Mangruvan, Örebro. From Saalfeld, Thuringia, Germany.**Name:** As an ORTHOhexagonal dimorph of *chamosite*.**Type Material:** n.d.**References:** (1) Brindley, G.W. (1951) The crystal structure of some chamosite minerals. *Mineral. Mag.*, 29, 502–522. (2) Novák, F., J. Vtelensky, J. Losert, F. Kupa, and Z. Valcha (1958) The orthochamosite from the ore veins of Kank near Kutna Hora – a new specific mineral. *Frantisek Slavik Memorial Vol.*, Czech Acad. Sci., 1957, 315–344 (in Czech with English summary). (3) (1958) *Amer. Mineral.*, 43, 792 (abs. ref. 2).