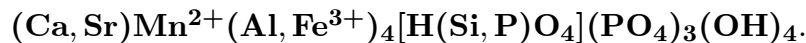


**Attakolite**

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**Crystal Data:** Monoclinic. *Point Group:* 2/m. Indistinctly crystalline, massive.  
*Twining:* Possible twin lamellae are observed in thin section.

**Physical Properties:** Hardness = 5 D(meas.) = 3.09–3.23 D(calc.) = [3.35]

**Optical Properties:** Transparent. *Color:* White to pale red; colorless in thin section.  
*Optical Class:* Biaxial (+). *Orientation:* Y = b; Z = c; X ∧ a = 24°. *Dispersion:* r < v to  
 r ≫ v, strong. α = 1.650–1.655 β = 1.654–1.664 γ = 1.661–1.675 2V(meas.) = 75°–84°  
 2V(calc.) = 74°

**Cell Data:** *Space Group:* C2/m. a = 17.188(4) b = 11.477(8) c = 7.322(5)  
 β = 113.83(4)° Z = 4

**X-ray Powder Pattern:** Västanå mine, Sweden.  
 3.09 (10), 3.13 (8), 4.34 (7), 2.97 (6), 6.61 (4), 5.68 (4), 3.51 (4)

<b>Chemistry:</b>	(1)	(2)		(1)	(2)
SiO <sub>2</sub>	9.35	5.9	Na <sub>2</sub> O	0.03	
Al <sub>2</sub> O <sub>3</sub>	26.97	26.8	F	0.10	
Fe <sub>2</sub> O <sub>3</sub>	0.60	3.9	Cl	0.06	
FeO	1.31		H <sub>2</sub> O <sup>+</sup>	5.92	[10.5]
MnO	7.10	9.7	H <sub>2</sub> O <sup>-</sup>	0.20	
PbO	0.03		CO <sub>2</sub>	0.57	
MgO	0.29		P <sub>2</sub> O <sub>5</sub>	32.59	33.6
CaO	11.40	6.6	SO <sub>3</sub>	0.13	
SrO	3.30	3.0	-O = (F, Cl) <sub>2</sub>	0.06	
			<hr/>		
			Total	99.89	[100.0]

(1) Västanå mine, Sweden; contaminated with calcite 1.30% and svanbergite 0.76%. (2) Do.;  
 by electron microprobe, total Fe as Fe<sub>2</sub>O<sub>3</sub> on crystallo-chemical grounds, H<sub>2</sub>O by difference;  
 corresponds to (Ca<sub>0.81</sub>Sr<sub>0.20</sub>)<sub>Σ=1.01</sub>Mn<sub>0.95</sub>(Al<sub>3.65</sub>Fe<sub>0.34</sub><sup>3+</sup>)<sub>Σ=3.99</sub>[H(Si<sub>0.68</sub>P<sub>0.28</sub>)<sub>Σ=0.96</sub>O<sub>4</sub>](PO<sub>4</sub>)<sub>3</sub>(OH)<sub>4</sub>.

**Occurrence:** In an iron deposit.

**Association:** Berlinite, lazulite, trolleite, apatite, svanbergite, pyrophyllite, hematite, calcite,  
 quartz.

**Distribution:** From the Västanå mine, near Näsrum, Skåne, Sweden.

**Name:** From the Greek for *salmon*, for the pale red color.

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 (1992) Attakolite: new data and crystal-structure determination. Amer. Mineral., 77, 1285–1291.