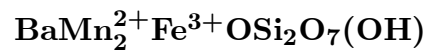


Ericssonite

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Crystal Data: Monoclinic. *Point Group:* $2/m$. As thick plates, tabular $\parallel \{100\}$, intimately intergrown with orthoericssonite, to 2 cm.

Physical Properties: *Cleavage:* Perfect on $\{100\}$, fair on $\{011\}$. *Tenacity:* Very brittle. Hardness = 4.5 D(meas.) = 4.21 D(calc.) = 4.38 Weakly magnetic.

Optical Properties: Translucent. *Color:* Deep reddish black; in thin section, brown to yellowish brown. *Streak:* Rich brown.

Optical Class: Biaxial (+); properties indistinguishable from orthoericssonite. *Pleochroism:* X = pale greenish tan; Y = red-brown; Z = deep brown. *Orientation:* $X = b$; $Y = c$; $Z = a$.

Dispersion: $r > v$, perceptible. *Absorption:* $Z > Y > X$. $\alpha = 1.807(5)$ $\beta = 1.833(5)$ $\gamma = 1.89(1)$ $2V(\text{meas.}) = 43^\circ$

Cell Data: *Space Group:* $C2/m$. $a = 20.46$ $b = 7.03$ $c = 5.34$ $\beta = 95^\circ 30'$ $Z = 4$

X-ray Powder Pattern: Långban, Sweden.

3.510 (100), 10.12 (60), 2.780 (60), 1.752 (60), 1.597 (60), 5.08 (50), 3.398 (50)

Chemistry:

	(1)	(2)
SiO ₂	20.83	23.83
Fe ₂ O ₃	14.47	15.83
As ₂ O ₅	1.23	
MnO	24.38	28.14
PbO	1.40	
BaO	29.81	30.41
H ₂ O	1.52	1.79
Total	93.64	100.00

(1) Långban, Sweden; by electron microprobe, intergrown with orthoericssonite, oxidation states and H₂O separately determined. (2) BaMn₂FeOSi₂O₇(OH).

Polymorphism & Series: Dimorphous with orthoericssonite.

Occurrence: A rare mineral, embedded in a fine-grained manganoan aegirine zone in well-banded tephroite-rhodonite-manganoan aegirine skarn, in a metamorphosed Fe–Mn orebody.

Association: Orthoericssonite, tephroite, rhodonite, manganoan aegirine, hedyphane, andradite, hausmannite, långbanite, richterite.

Distribution: From Långban, Värmland, Sweden.

Name: In honor of John E. Ericsson (1803–1889), Swedish-American inventor and designer of the iron-clad ship “Monitor,” who was born at Långban, Sweden.

Type Material: National Museum of Natural History, Washington, D.C., USA, 120061; The Natural History Museum, London, England, 1987,118.

References: (1) Moore, P.B. (1971) Ericssonite and orthoericssonite, two new members of the lamprophyllite group from Långban, Sweden. *Lithos*, 4, 137–145. (2) (1971) *Amer. Mineral.*, 56, 2157 (abs. ref. 1).