

# Seinäjokite

# (Fe, Ni)(Sb, As)<sub>2</sub>

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**Crystal Data:** Orthorhombic or pseudo-orthorhombic. *Point Group:* n.d. Massive.

**Physical Properties:** Hardness = n.d. VHN = 332 D(meas.) = n.d. D(calc.) = 7.938

**Optical Properties:** Opaque. *Color:* In polished section, pale gray with a rose tint.

*Luster:* Metallic.

*Optical Class:* Biaxial. *Anisotropism:* Distinct, brown to blue.

R<sub>1</sub>–R<sub>2</sub>: (400) —, (420) —, (440) 63.8, (460) 62.4, (480) 61.4, (500) 60.8, (520) 60.8, (540) 60.8, (560) 60.8, (580) 61.0, (600) 61.4, (620) 61.9, (640) 62.7, (660) 63.4, (680) 64.3, (700) 65.3

**Cell Data:** *Space Group:* n.d. *a* = 3.190(1) *b* = 5.81(1) *c* = 6.490(15) *Z* = 2

**X-ray Powder Pattern:** Seinäjoki deposit, Finland.

2.81 (100), 2.59 (90), 2.03 (80), 1.790 (60), 1.212 (5), 1.174 (30), 1.626 (20)

## Chemistry:

	(1)
Fe	15.4
Ni	4.0
Co	0.6
Sb	73.5
As	6.9
Te	1.2
Total	101.6

(1) Seinäjoki deposit, Finland; by electron microprobe, average of six analyses; corresponding to (Fe<sub>0.78</sub>Ni<sub>0.19</sub>Co<sub>0.03</sub>)<sub>Σ=1.00</sub>(Sb<sub>1.71</sub>As<sub>0.26</sub>Te<sub>0.03</sub>)<sub>Σ=2.00</sub>.

**Mineral Group:** Löllingite group.

**Occurrence:** In an antimony deposit, replacing antimony (Seinäjoki deposit, Finland).

**Association:** Antimony, antimonian westerveldite, breithauptite, altaite (Seinäjoki deposit, Finland).

**Distribution:** From the Seinäjoki antimony deposit, Vaasa, Finland [TL]. In the Ilímaussaq intrusion, southern Greenland. At Zolotaya Gora, Ural Mountains, Russia.

**Name:** For the occurrence at Seinäjoki, Finland.

**Type Material:** A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia.

**References:** (1) Mozgova, N.N., Y.S. Borodaev, N.A. Ozerova, V. Paakkonen, O.L. Sveshnikova, V.S. Balitskii, and B.A. Dorogovin (1976) Seinäjokite, (Fe<sub>0.8</sub>Ni<sub>0.2</sub>)(Sb<sub>1.7</sub>As<sub>0.3</sub>) and antimonian westerveldite from Seinäjoki, Finland. Zap. Vses. Mineral. Obshch., 105, 617–630 (in Russian). (2) (1977) Amer. Mineral., 62, 1059–1060 (abs. ref. 1). (3) Mozgova, N.N., Y.S. Borodaev, N.A. Ozerova, and V. Paakkonen (1977) New minerals of the group of iron antimonides and arsenides from the Seinäjoki deposit, Finland. Bull. Geol. Soc. Finland, 49, 47–52 (in English).