

Crystal Data: Monoclinic. *Point Group:* 2/m. As subparallel elongate, tabular on {100} to columnar, crystals to 0.4 mm.

Physical Properties: *Cleavage:* Perfect on {010}. *Fracture:* Irregular. *Tenacity:* Brittle. D(meas.) = n.d. D(calc.) = 6.44 *Hardness* = 4.5 [By analogy to ferberite.]

Optical Properties: Transparent to translucent. *Color:* Dark brown to greenish brown. *Streak:* Dark brown with a reddish hue. *Luster:* Adamantine. *Optical Class:* Biaxial (n.d.). $n(\text{calc.}) = 2.23$ *Pleochroism:* Weak, yellowish brown with a reddish tint \perp elongation and reddish brown (with stronger absorption) \parallel elongation.

Cell Data: *Space Group:* P2/c. $a = 4.784(1)$ $b = 5.693(1)$ $c = 5.120(1)$ $\beta = 91.15(3)^\circ$
Z = 2

X-ray Powder Pattern: Heftetjern pegmatite, Tørdal, Telemark, Norway.
3.000 (100), 2.9570 (97), 3.662 (53), 2.4877 (34), 4.783 (33), 3.807 (32), 2.5595 (29)

Chemistry:	(1)
Sc ₂ O ₃	15.59
SnO ₂	6.93
TiO ₂	1.61
MnO	3.02
FeO	2.07
Ta ₂ O ₅	53.58
Nb ₂ O ₅	14.25
Total	97.05

(1) Heftetjern pegmatite, Tørdal, Telemark, Norway; average of 8 electron microprobe analyses; corresponds to (Sc_{0.64}Sn_{0.13}Mn_{0.12}Fe_{0.08}Ti_{0.06}) $\Sigma=1.03$ (Ta_{0.69}Nb_{0.30}) $\Sigma=0.99$ O₄.

Occurrence: In vugs in albite in a mixed LCT-NYF type cleavelandite-amazonite pegmatite.

Association: Albite, fluorite, muscovite, altered milarite, and a metamict, dark grayish brown mineral of the pyrochlore-microlite group.

Distribution: From the Heftetjern pegmatite, between Høydalen and Skarsfjell, Tørdal, Telemark, Norway.

Name: For the locality that produced the first specimens, *Heftetjern* pegmatite, Norway.

Type Material: Department of Geology, Natural History Museum, University of Oslo, Norway (# 41726).

References: (1) Kolitsch, U., R. Kristiansen, G. Raade, and E. Tillmanns (2010) Heftetjernite, a new scandium mineral from the Heftetjern pegmatite, Tørdal, Norway. *Eur. J. Mineral.*, 22, 309-316. (2) (2011) *Amer. Mineral.*, 96, 942 (abs. ref. 1).