

Crystal Data: Monoclinic. *Point Group:* 2/m. As euhedral or semi-euhedral stout prisms, elongated along [010], to 90 μm. *Twinning:* Narrow lamellae parallel {h0l}.

Physical Properties: *Cleavage:* n.d. *Fracture:* n.d. *Tenacity:* n.d. *Hardness:* = n.d. D(meas.) = n.d. D(calc.) = 3.84

Optical Properties: Transparent. *Color:* Blue-green to brown in thin section. *Streak:* n.d. *Luster:* n.d.

Optical Class: Biaxial (+). $\alpha' = \sim 1.78$ $\gamma' = \sim 1.805$ $2V(\text{meas.}) = 33(5)^\circ$ *Orientation:* X = b. *Pleochroism:* Strong, X = brown, Y = brown, Z = blue-green.

Cell Data: *Space Group:* P2/m. $a = 5.3444(7)$ $b = 3.0300(5)$ $c = 10.506(1)$ $\beta = 94.46(1)^\circ$ Z = 2

X-ray Powder Pattern: n.d.

Chemistry:	(1)	(2)
MgO	33.94	48.45
FeO	15.97	
Al ₂ O ₃	15.86	30.63
SnO ₂	11.88	
TiO ₂	0.75	
MnO	0.42	
CaO	0.11	
B ₂ O ₃	[17.07]	20.92
Total	96.00	100.00

(1) Tas-Khayakhtakh ridge, near Kebirin'ya Creek, Republic of Sakha-Yakutia, Russia; average of 4 electron microprobe analyses, B₂O₃ calculated; recalculated corresponding to (Mg_{1.55}Fe²⁺_{0.45})_{Σ=2.00}(Al_{0.63}Mg_{0.17}Sn_{0.16}Ti_{0.02}Mn_{0.01})_{Σ=0.99}O₂(BO₃). (2) Mg₂AlO₂(BO₃).

Mineral Group: Hulsite group.

Occurrence: In one thin section from a magnesian, spinel-bearing, kotoite-marble skarn.

Association: Ludwigite, calcite, spinel, löllingite, pertsevite, clinohumite.

Distribution: From the Tas-Khayakhtakh ridge, Chersky Mountain System, near the mouth of Kebirin'ya Creek, a northern tributary of the Dogdo River, ~250 km east of Verkhoyansk, Republic of Sakha-Yakutia, Russia.

Name: Describes the mineral as the Al- and Mg-dominant analogue of *hulsite*.

Type Material: Mineralogical Collection, Institute for Geology, Mineralogy and Geophysics, Ruhr-Universität Bochum, Germany (25164).

References: (1) Pertsev, N.N., W. Schreyer, T. Armbruster, H.-J. Bernhardt, and O. Medenbach (2004) Alumino-magnesiohulsite, a new member of the hulsite group, in kotoite marble from east of Verkhoyansk, Sakha-Yakutia, Russia. *Eur. J. Mineral.*, 16, 151-161. (2) (2004) *Amer. Mineral.*, 89(10), 1574-1575 (abs. ref. 1 and comment).