

Crystal Data: Monoclinic. *Point Group:* 2/m. As aggregates of slender prismatic to fibrous crystals, elongated along [010].

Physical Properties: *Cleavage:* In one direction || [010], perfect. Hardness = 5.5
D(meas.) = 2.91 D(calc.) = 2.91

Optical Properties: Translucent. *Color:* White, pale gray; colorless in transmitted light.
Luster: Silky to pearly.
Optical Class: Biaxial (-). *Orientation:* X = b. *Dispersion:* r > v, weak. α = 1.596
β = 1.639 γ = 1.670 2V(meas.) = 70°

Cell Data: *Space Group:* P2₁/c (synthetic). a = 12.303(4) b = 3.1228(9) c = 9.917(4)
β = 104.26(3)° Z = 4

X-ray Powder Pattern: Hol Kol mine, North Korea.
2.557 (100), 2.010 (60), 2.823 (50), 1.916 (30), 4.47 (25), 1.562 (21), 2.983 (18)

Chemistry:	(1)	(2)
SiO ₂	0.80	
B ₂ O ₃	42.28	46.34
(Al + Fe) ₂ O ₃	0.63	
MgO	50.64	53.66
CaO	1.52	
H ₂ O ⁺	3.87	
H ₂ O ⁻	0.19	
Total	99.93	100.00

- (1) Hol Kol mine, North Korea; after deduction of szaibélite, corresponds to Mg_{1.96}B₂O₅.
(2) Mg₂B₂O₅.

Occurrence: In a contact metasomatic hydrothermal boron deposit in diopside-clinohumite-dolomite-calcite skarn (Hol Kol mine, North Korea).

Association: Kotoite, sakhaite, ludwigite, szaibélyite, clinohumite, forsterite, apatite, spinel, calcite.

Distribution: From the Hol Kol Au-Cu mine, about 75 km southeast of Pyongyang, Suan Co., North Korea. At the Zhuanniao and Houxianyu boron deposits, Liaoning Province, China. In Russia, in Sakha, from the Titovskoye boron-iron deposit, Tas-Khayakhtakh Mountains, in the Taiga boron-iron deposit, and from the Tayozhnoye iron deposit, 550 km south of Yakutsk. From Băița (Rézbánya), Băișoara, Cacova Ierii, Gilău Mountains, and elsewhere in Romania. At Kami-neichi, Miyako, Iwate Prefecture, Japan.

Name: For Suan Co., the North Korean region from which the first specimens were collected.

Type Material: n.d.

References: (1) Watanabe, T. (1953) Suanite, a new magnesium borate mineral from Hol Kol, Suan, North Korea. *Mineral. J. (Japan)*, 1, 54-62. (2) (1955) *Amer. Mineral.*, 40, 941 (abs. ref. 1). (3) Guo, G.-C., W.-D. Cheng, J.-T. Chen, H.-H. Zhuang, J.-S. Huang, and Q.-E. Zhang (1995) Monoclinic Mg₂B₂O₅. *Acta Cryst.*, C51, 2469-2471. (4) Mrose, M.E. and M. Fleischer (1963) The probable identity of magnioborite with suanite. *Amer. Mineral.*, 48, 915-924.