

Oyelite**Ca₁₀B₂Si₈O₂₉•12.5H₂O**

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Crystal Data: Orthorhombic. *Point Group:* n.d. As aggregates of nearly parallel acicular crystals, to 3 mm.

Physical Properties: Hardness = 5 D(meas.) = 2.62 D(calc.) = [2.66]

Optical Properties: Semitransparent. *Color:* White; colorless in thin section.

Luster: Vitreous.

Optical Class: Biaxial. $\alpha = 1.602$ $\beta = 1.606$ $\gamma = 1.613$ $2V(\text{meas.}) = \text{n.d.}$

Cell Data: *Space Group:* n.d. $a = 11.25$ $b = 7.25$ $c = 20.46$ $Z = [2]$

X-ray Powder Pattern: Fuka, Japan.

10.23 (100), 2.917 (60), 3.411 (25), 2.558 (15), 2.046 (13), 3.784 (10)

Chemistry:

	(1)	(2)
SiO ₂	35.3	35.97
B ₂ O ₃	4.8	5.21
Al ₂ O ₃	0.3	
CaO	41.2	41.97
Na ₂ O	0.1	
H ₂ O ⁺	16.7	16.85
H ₂ O ⁻	0.7	
CO ₂	0.4	
Total	99.5	100.00

(1) Fuka, Japan. (2) Ca₁₀B₂Si₈O₂₉•12.5H₂O.

Occurrence: In a vein in gehlenite-spurrite skarn (Fuka, Japan).

Association: Bultfonteinite, scawtite, xonotlite, calcite (Fuka, Japan).

Distribution: At Fuka, near Bicchu, Okayama Prefecture, Japan. From Crestmore, Riverside Co., California, USA. In the N'Chwaning mine, near Kuruman, Cape Province, South Africa.

Name: For Dr. Jiro Oye, late Professor of Mineralogy, Okayama University, Okayama, Japan.

Type Material: National Science Museum, Tokyo, Japan, M23576; National Museum of Natural History, Washington, D.C., USA, 148213.

References: (1) Kusachi, I., C. Henmi, and K. Henmi (1984) An oyelite-bearing vein at Fuka, the town of Bitchu, Okayama Prefecture, Japan. *J. Japan. Assoc. Min. Petr. Econ. Geol.*, 79, 267–275. (2) (1986) *Amer. Mineral.*, 71, 230 (abs. ref. 1). (3) Heller, L. and H.F.W. Taylor (1956) Crystallographic data for the calcium silicates. H.M. Stationary Office, London, 37–38 [tobermorite 10Å hydrate].