

Crystal Data: Triclinic. *Point Group:* $\bar{1}$ or 1. Platy crystals, to 1 cm; in cross-fiber veinlets and anhedral massive. *Twinning:* Polysynthetic, very common.

Physical Properties: Hardness = 3.5–4 D(meas.) = 2.19–2.23 D(calc.) = 2.31

Optical Properties: Semitransparent. *Color:* Colorless, white to pale brown; colorless in thin section. *Luster:* Vitreous.

Optical Class: Biaxial (-). *Orientation:* Negative elongation, extinction at a small angle.

Dispersion: $r > v$, weak. $\alpha = 1.553\text{--}1.557$ $\beta = 1.562\text{--}[1.568]$ $\gamma = 1.567\text{--}1.570$

2V(meas.) = 54°–60°

Cell Data: *Space Group:* $P\bar{1}$ or $P1$. $a = 9.991(5)$ $b = 14.740(11)$ $c = 7.975(3)$
 $\alpha = 94.53(4)^\circ$ $\beta = 69.08(3)^\circ$ $\gamma = 112.44(5)^\circ$ $Z = 3$

X-ray Powder Pattern: Fuka, Japan.

2.873 (100), 6.79 (52), 4.49 (49), 6.72 (40), 2.573 (35), 7.42 (34), 8.63 (32)

Chemistry:

	(1)	(2)	(3)
SiO ₂	0.36		
CO ₂	2.36		
B ₂ O ₃	27.95	29.64	29.65
Al ₂ O ₃	0.15		
Fe ₂ O ₃	0.17		
MgO	1.79		
CaO	34.81	34.50	35.82
H ₂ O ⁺	32.27	34.54	34.53
H ₂ O ⁻	0.55	1.21	
Total	100.41	99.89	100.00

(1) Titovskoye deposit, Russia; after deduction of MgO as szaibélyite, CO₂ as calcite, quartz, and “limonite”, corresponds to Ca_{3.00}B_{4.00}(OH)_{18.55}. (2) Fuka, Japan; corresponds to Ca_{2.89}B_{4.00}(OH)₁₈. (3) Ca₃B₄(OH)₁₈.

Occurrence: In magnesian skarn (Titovskoye deposit, Russia); formed by alteration of nifontovite and some other anhydrous borate, near gehlenite-spurrite skarn (Fuka, Japan).

Association: Sakhaite, szaibélyite, calcite, “limonite”, quartz (Titovskoye deposit, Russia); nifontovite, frolovite, pentahydroborite, takedaite, sibirskite, parasibirskite, borcarite, bultfonteinite, calcite (Fuka, Japan).

Distribution: From the Titovskoye boron deposit, Tas-Khayakhtakh Range, Polar Sakha, Russia. Large crystals at Fuka, near Bicchu, Okayama Prefecture, Japan.

Name: To honor Yakov Iosifovich Ol'shanskii (1912–1958), specialist in physical geochemistry, Institute of Geology of Ore Deposits, Petrology, Mineralogy, and Geochemistry, Moscow, Russia.

Type Material: Mining Institute, St. Petersburg, 1493/1; A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia, 71541–71544.

References: (1) Bogomolov, M.A., I.B. Nikitina, and N.N. Pertsev (1969) Olshanskyite, a new calcium borate. Doklady Acad. Nauk SSSR, 184, 1398–1401 (in Russian). (2) (1969) Amer. Mineral., 54, 1737–1738 (abs. ref. 1). (3) Kusachi, I. and C. Henmi (1994) Nifontovite and olshanskyite from Fuka, Okayama Prefecture, Japan. Mineral. Mag., 58, 279–284. (4) Pekov, I.V. (1998) Minerals first discovered on the territory of the former Soviet Union. Ocean Pictures, Moscow, 157.

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