

Crystal Data: Monoclinic. *Point Group:* 2/m. Subhedral crystals, tabular, vertically striated, to 0.2 mm.

Physical Properties: *Cleavage:* One, imperfect, parallel elongation. Hardness = 3.5
D(meas.) = 2.514 D(calc.) = 2.58

Optical Properties: Transparent. *Color:* Colorless. *Luster:* Vitreous.
Optical Class: Biaxial (+). *Orientation:* $Z \wedge c = 25^\circ$, positive elongation. *Dispersion:* $r > v$, very weak. $\alpha = 1.510(1)$ $\beta = 1.510(1)$ $\gamma = 1.545(1)$ 2V(meas.) = Very small.

Cell Data: *Space Group:* $P2_1/b$. $a = 7.975(2)$ $b = 12.571(5)$ $c = 7.237(2)$
 $\beta = 86.14(3)^\circ$ $Z = 4$

X-ray Powder Pattern: Solongo deposit, Russia.
2.196 (10), 7.84 (9), 1.734 (9), 2.61 (8), 2.54 (8), 1.911 (8), 2.74 (7)

Chemistry:	(1)	(2)
B ₂ O ₃	38.54	37.29
MgO	0.50	
CaO	39.54	40.05
Cl	7.62	12.66
H ₂ O ⁺	15.40	
H ₂ O ⁻	0.00	
H ₂ O		12.86
-O = Cl ₂	1.74	2.86
Total	99.86	100.00

(1) Solongo deposit, Russia; H₂O absent by IR; corresponds to (Ca_{1.92}Mg_{0.03})_{Σ=1.95}B_{3.02}O₄Cl_{0.58}(OH)_{4.66}. (2) Ca₂B₃O₄Cl(OH)₄.

Occurrence: From a drillhole into a contact metamorphic boron deposit at a depth of 400 m.

Association: Szaibélyite, andradite–grossular, kurchatovite, calcite, “chlorite”, vesuvianite, svabite, magnetite, hematite, sphalerite, quartz.

Distribution: From the Solongo boron deposit, Buryatia, Russia.

Name: For the Solongo (Buryat for *rainbow*, for the variety of boron minerals contained) deposit, Russia, from which it was first noted.

Type Material: A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia, 74785.

References: (1) Malinko, S.V. (1974) The new boron mineral – solongoite. Zap. Vses. Mineral. Obshch., 103, 117–121 (in Russian). (2) (1975) Amer. Mineral., 60, 162–163 (abs. ref. 1). (3) Yamnova, N.A., M.A. Simonov, and N.V. Belov (1977) Refined crystal structure of solongoite Ca₂[B₃O₄(OH)₄]Cl. Kristallografiya (Sov. Phys. Crystal.), 22, 624–626 (in Russian).