

**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.  $\alpha = 1.510(1)$   $\beta = 1.510(1)$   $\gamma = 1.545(1)$   $2V(\text{meas.}) = \text{Very small}$ .

**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 <sub>2</sub> O <sub>3</sub>	38.54	37.29
MgO	0.50	
CaO	39.54	40.05
Cl	7.62	12.66
H <sub>2</sub> O <sup>+</sup>	15.40	
H <sub>2</sub> O <sup>-</sup>	0.00	
H <sub>2</sub> O		12.86
-O = Cl <sub>2</sub>	1.74	2.86
Total	99.86	100.00

(1) Solongo deposit, Russia; H<sub>2</sub>O absent by IR; corresponds to (Ca<sub>1.92</sub>Mg<sub>0.03</sub>)<sub>Σ=1.95</sub>B<sub>3.02</sub>O<sub>4</sub>Cl<sub>0.58</sub>(OH)<sub>4.66</sub>. (2) Ca<sub>2</sub>B<sub>3</sub>O<sub>4</sub>Cl(OH)<sub>4</sub>.

**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 Ca<sub>2</sub>[B<sub>3</sub>O<sub>4</sub>(OH)<sub>4</sub>]Cl. Kristallografiya (Sov. Phys. Crystal.), 22, 624–626 (in Russian).