

Crystal Data: Monoclinic. *Point Group:* 2/m. As tabular crystals, elongated along [100] and flattened on (001), to 1.5 cm.

Physical Properties: *Cleavage:* Perfect on {001}. *Fracture:* n.d. *Tenacity:* Brittle.
Hardness = 6 D(meas.) = 2.49 D(calc.) = 2.57

Optical Properties: Transparent. *Color:* Colorless. *Streak:* White. *Luster:* Vitreous.
Optical Class: Biaxial (+). $\alpha = 1.573(2)$ $\beta = 1.586(2)$ $\gamma = 1.626(2)$ $2V(\text{meas.}) = 60(2)^\circ$
 $2V(\text{calc.}) = 59^\circ 23'$ *Dispersion:* Medium, $r > v$. *Orientation:* $X = c, Y = b, Z \wedge a = 8^\circ$.

Cell Data: Space Group: $P2_1/a$. $a = 8.386(3)$ $b = 8.142(4)$ $c = 7.249(3)$ $\beta = 98.33(3)^\circ$ $Z = 4$

X-ray Powder Pattern: The Jarandol basin, Serbia.

3.39 (100), 4.32 (57), 3.13 (50), 2.606 (25), 1.849 (25), 2.93 (23), 2.287 (19)

Chemistry:	(1)
Na ₂ O	0.05
K ₂ O	0.07
CaO	30.56
MgO	0.02
MnO	0.01
Fe ₂ O ₃	0.20
Al ₂ O ₃	0.03
SiO ₂	0.20
B ₂ O ₃	55.44
Cl	0.21
H ₂ O	13.36
-O = Cl	0.05
Total	100.10

(1) The Jarandol basin, Serbia; average of 5 electron microprobe analyses supplemented by IR spectroscopy, H₂O by DTA; corresponds to Ca_{1.02}(B_{2.99}Si_{0.01})_{Σ=3.00}O_{4.125}(OH)_{2.79}Cl_{0.01}.

Occurrence: Formed from abnormally highly saline water in a closed lacustrine basin of mixed volcanic tuffs and sedimentary clays and marls.

Association: Colemanite, howlite, lüneburgite, montmorillonite, pentahydroborite, searlesite, studenitsite, ulexite, veatchite.

Distribution: From the Jarandol basin, 280 km south of Belgrade, Serbia.

Name: For the locality, the *Jarandol* basin, that produced the first specimens.

Type Material: A.E. Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia (# 1538/1).

References: (1) Malinko, S.V., S. Anic'ic', D. Joksimovic', A.E. Lisitsyn, V.V. Rudnev, G.I. Dorokhova, N.A. Yamnova, V.V. Vlasov, A.A. Ozol, and N.V. Chukanov (2004) Jarandolite Ca[B₃O₄(OH)₃], calcium borate from Serbia: New name and new data. *New Data on Minerals* (Moscow), 39, 26-31. (2) (2006) *Amer. Mineral.*, 91, 217-218 (abs. ref. 1).