

Crystal Data: Monoclinic. *Point Group:* 2/m. As flattened wedge-shaped crystals, to 5 mm, dominated by {001}, {011}, {111}, with poorly developed {100}, {110}, {012}, in aggregates.

Physical Properties: *Tenacity:* "Fragile". Hardness = 5.5–6 VHN = 527–550
D(meas.) = 2.29 D(calc.) = 2.34

Optical Properties: Translucent to transparent in thin pieces. *Color:* Colorless, pale gray, yellowish gray. *Streak:* White.

Optical Class: Biaxial (+). *Orientation:* X = b; Z = a; Y ∧ c = 10°. *Dispersion:* r > v, medium. α = 1.532(2) β = 1.538(2) γ = 1.564(2) 2V(meas.) = 54(2)°

Cell Data: *Space Group:* P2₁/c. a = 11.4994(8) b = 12.5878(9) c = 10.5297(7)
β = 99.423(6)° Z = 4

X-ray Powder Pattern: Piskaya deposit, Yugoslavia.
3.04 (100), 3.35 (89), 5.41 (66), 3.27 (59), 2.210 (59), 5.20 (57), 4.20 (56)

| Chemistry: | (1) | (2) | | (1) | (2) |
|--------------------------------|-------|-------|-------------------------------|---------------|---------------|
| SiO ₂ | 0.09 | | CaO | 20.84 | 21.22 |
| CO ₂ | 0.00 | | SrO | 0.09 | |
| B ₂ O ₃ | 59.64 | 59.28 | Na ₂ O | 5.96 | 5.86 |
| Al ₂ O ₃ | 0.05 | | K ₂ O | 0.08 | |
| Fe ₂ O ₃ | 0.05 | | H ₂ O ⁺ | 13.64 | |
| MnO | 0.01 | | H ₂ O ⁻ | 0.00 | |
| MgO | 0.02 | | H ₂ O | | 13.64 |
| | | | <u>Total</u> | <u>100.47</u> | <u>100.00</u> |

(1) Piskaya deposit, Yugoslavia; (OH)¹⁻ and H₂O confirmed by IR.

(2) NaCa₂B₉O₁₄(OH)₄•2H₂O.

Occurrence: As lenses in clay and carbonate-bearing volcanogenic-sedimentary borate deposits.

Association: Colemanite, howlite, ulexite, pentahydroborite.

Distribution: From the Piskaya deposit, Yarondolskii Basin, on the Ibar River, 280 km south of Belgrade, Yugoslavia.

Name: For the Studentitsa Cloister near the first occurrence.

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

References: (1) Malinko, S.V., S. Anichich, D. Yoksimovich, A.E. Lisitsyn, G.I. Dorokhova, M.A. Yamnova, V.V. Vlasov, and A.A. Ozol (1995) Studentitsite NaCa₂[B₉O₁₄(OH)₄]•2H₂O – a new borate from Serbia, Yugoslavia. Zap. Vses. Mineral. Obshch., 124(3), 57–64 (in Russian with English abs.). (2) (1996) Amer. Mineral., 81, 1284 (abs. ref. 1).