

Crystal Data: Orthorhombic. *Point Group:* $2/m\ 2/m\ 2/m$. Crystals prismatic, rhomboidal to square in cross section, to 50 cm; also as disseminated masses.

Physical Properties: *Cleavage:* Indistinct on {001}. *Fracture:* Uneven to subconchoidal. *Tenacity:* Brittle. Hardness = 7–7.25 D(meas.) = 2.93–3.02 D(calc.) = 2.99

Optical Properties: Transparent to translucent. *Color:* Colorless, white, wine-yellow, yellowish brown, greenish; colorless in thin section. *Streak:* White. *Luster:* Vitreous to greasy. *Optical Class:* Biaxial (-). *Dispersion:* $r < v$, strong. $\alpha = 1.627\text{--}1.633$ $\beta = 1.630\text{--}1.636$ $\gamma = 1.633\text{--}1.639$ $2V(\text{meas.}) = \sim 90^\circ$

Cell Data: *Space Group:* $Pnam$. $a = 8.038(3)$ $b = 8.752(5)$ $c = 7.730(3)$ $Z = 4$

X-ray Powder Pattern: Maglovec Hill, Prešov, Slovakia. 3.57 (100), 2.961 (80), 2.743 (65), 2.655 (55), 2.729 (40), 1.435 (40), 3.65 (35)

Chemistry:

	(1)
SiO ₂	49.18
B ₂ O ₃	27.65
Al ₂ O ₃	0.42
FeO	0.26
MnO	0.02
MgO	0.11
CaO	22.10
SrO	0.03
Na ₂ O	0.07
H ₂ O	0.24
Total	100.08

(1) Maglovec Hill, Prešov, Slovakia; corresponds to $(\text{Ca}_{0.97}\text{Na}_{0.01}\text{Mg}_{0.01}\text{Fe}_{0.01})_{\Sigma=1.00}(\text{B}_{1.95}\text{Al}_{0.02})_{\Sigma=1.97}\text{Si}_{2.01}\text{O}_{8.00}$.

Occurrence: In granite and metamorphosed carbonate rocks associated with hydrothermal activity; in evaporites.

Association: Titanite, axinite, tourmaline, mica, quartz, grossular, albite, fluorite, apophyllite, stilbite, datolite, bakerite, dolomite, calcite, anhydrite, gypsum.

Distribution: In the USA, at Danbury, Fairfield Co., Connecticut; and at Russell, St. Lawrence Co., New York. In Mexico, large crystals from Charcas, San Luis Potosí; and in the La Verde mine, near La Huerta, Baja California. From Alto Chapare, Cochabamba, Bolivia. In Switzerland, on the Piz Valatscha, Mt. Scopi, south of Disentis, Graubünden. In Madagascar, very large crystals from Anjanabonoina; at Maharitra, Mt. Bity; at Imalo, near Mania, south of the Betafo district; and at Sahasonjo, northeast of Andina. In Russia, from Alabashka, near Mursinka, Ural Mountains; large crystals from Vostochnaïa, Siberia, and at Dal'negorsk, Primorskiy Kray; numerous other minor occurrences. From the Mogok district, Myanmar (Burma). In Japan, from the Obira mine, Bungo, Oita Prefecture, and at Toroku, Miyazaki Prefecture.

Name: For the locality at Danbury, Connecticut, USA.

References: (1) Dana, E.S. (1892) Dana's system of mineralogy, (6th edition), 490–492. (2) Černý, P. (1973) The occurrence of danburite in xenoliths in andesite from Maglovec, near Prešov, Czechoslovakia. Acta Univ. Carol., Geol., Rost vol., 111–118 (in Czech with English abs.). (3) Phillips, M.W., G.V. Gibbs, and P.H. Ribbe (1974) The crystal structure of danburite: a comparison with anorthite, albite, and reedmergnerite. Amer. Mineral., 59, 79–85.

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