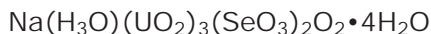


Larisaite



MONOCLINIC

Locality: Repete mine, near Blanding, San Juan County, Utah, USA.

Occurrence: In sedimentary rock. Associated minerals are: quartz, haynesite, andersonite, wölsendorfite, uranophane, gypsum, calcite and montmorillonite.

General appearance: Coarse lamellar crystals up to 1 mm and rosettes up to 2 mm.

Physical, chemical and crystallographic properties: *Luster:* vitreous. *Diaphaneity:* transparent or translucent. *Color:* canary yellow. *Streak:* yellow. *Luminescence:* green for 250 nm. *Hardness:* 1. *Tenacity:* sectile. *Cleavage:* {010} perfect. *Fracture:* uneven. *Density:* could not be measured, 4.46 g/cm³ (calc.). **Crystallography:** Monoclinic, *Pm*, *a* 6.981, *b* 17.249, *c* 7.646 Å, β 90.04°, *V* 920.64 Å³, *Z* = 2. Morphology: {010} is the dominant form. Twinning: none observed. **X-ray powder-diffraction data:** 8.63(43)(002), 7.67(100)(010), 7.02(33)(011,100), 3.85(40)($\bar{1}$ 13,020,113), 3.176(33)($\bar{2}$ 10), 3.107(77)(211), 2.874(53)(006, $\bar{1}$ 15), 1.342(33)(338, $\bar{2}$.2.11). **Optical data:** Biaxial (-), α 1.597, β 1.770, γ 1.775, 2*V*(meas.) 20°, 2*V*(calc.) 18°; dispersion *r* < *v*, strong; pleochroism *X* light green, *Y* yellow, *Z* yellow; *X* = *b*, *Z* is the elongation direction. **Chemical analytical data:** Mean of three sets of electron-microprobe data: Na₂O 2.04, K₂O 0.69, CaO 0.23, SeO₂ 18.12, UO₃ 72.19, H₂O 7.64, Total 100.91 wt.%. Empirical formula: (Na_{0.81}K_{0.18}Ca_{0.05})Σ1.04(H₃O)_{0.73}(UO₂)_{3.09}O_{2.00}(SeO₃)_{2.00}•4.10H₂O. **Relationship to other species:** None apparent.

Name: After Larisa Nikolaevna Belova (1923–1998), Russian mineralogist and crystallographer. **Comments:** IMA No. 2002–061. The unconventional space group *P11m* and the unit-cell parameters *a* 6.981, *b* 7.646, *c* 17.249 Å, β 90.04° are given in the paper. Those data have been changed here to the conventional space-group, which required the *b* and *c* axes to be interchanged.

CHUKANOV, N.V., PUSHCHAROVSKY, D.YU., PASERO, M., MERLINO, S., BARINOVA, A.V., MÖCKEL, S., PEKOV, I.V., ZADOV, A.E. & DUBINCHUK, V.T. (2004): Larisaite, Na(H₃O)(UO₂)₃(SeO₃)₂O₂•4H₂O, a new uranyl selenite mineral from Repete mine, San Juan County, Utah, U.S.A. *European Journal of Mineralogy* **16**, 367-374.