

Crystal Data: Hexagonal. *Point Group:* $\bar{6} m2$. As bladed or acicular, prismatic crystals, elongated along [0001] to 0.2 mm; as tightly packed aggregates to 0.5 mm. Crystals display {0001}, {11 $\bar{1}$ 01}, {10 $\bar{1}$ 0}, {01 $\bar{1}$ 0}. *Twinning:* Common on (0001).

Physical Properties: *Cleavage:* Perfect on {0001}; good on {10 $\bar{1}$ 0}. *Fracture:* Uneven. *Tenacity:* Brittle. Hardness = ~2 D(meas.) = n.d. D(calc.) = 2.966 Fluoresces bright greenish white under LW and SW UV. Dissolves in dilute HCl.

Optical Properties: Transparent. *Color:* Sulfuric-yellow. *Streak:* Pale yellow. *Luster:* Vitreous to pearly. *Optical Class:* Uniaxial (+). $\omega = 1.484(2)$ $\epsilon = 1.547(2)$ Negative elongation.

Cell Data: *Space Group:* $P\bar{6} 2m$. $a = 9.0664(11)$ $c = 6.9110(6)$ $Z = 1$

X-ray Powder Pattern: Geschieber vein, Svornost mine, Jáchymov, Czech Republic. 5.193 (100), 7.861 (59), 4.534 (44), 2.618 (25), 3.415 (23), 6.925 (20), 2.728 (20)

Chemistry:	(1)
Na ₂ O	27.92
SO ₃	18.49
UO ₃	32.85
CO ₂	[15.08]
H ₂ O	[6.17]
Total	100.51

(1) Geschieber vein, Svornost mine, Jáchymov, Czech Republic; average of 9 electron microprobe analyses supplemented by Raman spectroscopy, CO₂ and H₂O calculated from stoichiometry; corresponds to Na_{7.88}(UO₂)(CO₃)₃(S_{1.01}O₄)₂·3H₂O.

Occurrence: As crusts, a secondary, low-temperature mineral formed by the alteration of uraninite during post-mining weathering of a hydrothermal vein-type (Ag-Bi-Co-Ni-U) deposit.

Association: Andersonite, čejkaite, schrockingerite, andersonite, natrozippeite, gypsum.

Distribution: From the Geschieber vein, Svornost mine, Jáchymov, Western Bohemia, Czech Republic.

Name: Honors Bohuslav Ježek (1877-1950), a Czech mineralogist and crystallographer, professor of both Charles University in Prague and Technical University of Mining in Příbram.

Type Material: A.E. Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia (4606/1).

References: (1) Plášil, J., J. Hloušek, A.V. Kasatkin, D.I. Belakovskiy, J. Čejka, and D. Chernyshov (2015) Ježekite, Na₈[(UO₂)(CO₃)₃](SO₄)₂·3H₂O, a new uranyl mineral from Jáchymov, Czech Republic. *J. Geosciences*, 60(4), 259-267. (2) (2017) *Amer. Mineral.*, 102, 1963 (abs. ref. 1).