Crystal Data: Monoclinic. *Point Group*: 2/*m*. Crystals display {100}, {010}, {011} and {0$\bar{1}$ 1}. As bladed crystals to 50 μm, elongated along [001] and flattened on {010}; as globular aggregates to 0.5 mm. *Twinning*: Common on {100}.

Physical Properties: *Cleavage*: Perfect on {010}. *Fracture*: Uneven. *Tenacity*: Brittle. Hardness = ~ 2 D(meas.) = n.d. D(calc.) = 4.926

Optical Properties: Transparent. *Color*: Reddish to reddish orange. *Streak*: Pale orange. *Luster*: Vitreous to silky.
Optical Class: Biaxial (+). α = 1.740(5) β = 1.770(5) γ = 1.850(5) 2V(meas.) = 64.6(4)° 2V(calc.) = 65.3° *Dispersion*: None. *Pleochroism*: None.

Cell Data: *Space Group*: *C*2/*c*. *a* = 8.6254(16) *b* = 14.258(3) *c* = 17.703(4) β = 104.052(18)° Z = 8

X-ray Powder Pattern: Plavno mine, Jáchymov ore district, Western Bohemia, Czech Republic. 7.133 (100), 3.104 (47), 3.446 (36), 8.59 (27), 3.565 (25), 2.658 (15), 2.865 (14)

Chemistry:	(1)	(2)
K_2O	3.77	4.74
MnO	3.75	5.35
NiO	0.21	
ZnO	0.35	
MgO	0.08	
SiO_2	1.52	
SO_3	7.93	10.06
UO_3	59.29	71.91
H_2O	[7.40]	7.92
Total	84.30	99.99

(1) Plavno mine, Jáchymov ore district, Western Bohemia, Czech Republic; average of 5 electron microprobe analyses supplemented by Raman spectroscopy, H_2O calculated for charge balance and 3.5 H_2O pfu, low analytical total due to grain size, Si from matrix; corresponds to $K_{0.77}(Mn_{0.51}Zn_{0.04}Ni_{0.03}Mg_{0.02})_{\Sigma=0.60}[(UO_2)_2O_{1.08}(OH)_{0.92}(SO_4)_{0.96}(SiO_4)_{0.24}](H_2O)_{3.50}$.
(2) $K_{0.8}Mn_{0.6}[(UO_2)_2O_2(SO_4)]\cdot 3.5H_2O$.

Mineral Group: Zippeite group.

Occurrence: A secondary alteration mineral formed by hydration-oxidation weathering of uraninite in a hydrothermal Ag-Bi-Co-Ni-U vein deposit.

Association: Marécottite, magnesiozippeite, blatonite, gypsum.

Distribution: From vein no. 13, second level, Vladimír shaft, Plavno mine, eastern Jáchymov ore district, Western Bohemia, Czech Republic.

Name: For the mine in which the first samples were collected.

Type Material: Natural History Museum of Los Angeles County, Los Angeles, California, USA (65588); National Museum in Prague, Department of Mineralogy and Petrology, Czech Republic (P1P 4/2015); and the A.E. Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia (4740/1).

References: (1) Plášil, J., P. Škácha, J. Sejkora, A.R. Kampf, R. Škoda, J. Čejka, J. Hloušek, A.V. Kasatkin, R. Pavlíček, and K. Babka (2017) Plavnoite, a new K-Mn member of the zippeite group from Jáchymov, Czech Republic. Eur. J. Mineral., 29(1), 117-128. (2) (2017) Amer. Mineral., 102, 1965-1966 (abs. ref. 1).