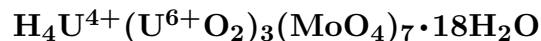


Moluranite



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Crystal Data: Amorphous. *Point Group:* n.d. As colloform aggregates in brannerite.

Physical Properties: *Tenacity:* Brittle. Hardness = 3–4 D(meas.) = ~4 D(calc.) = n.d. Radioactive.

Optical Properties: Translucent. *Color:* Black, brown in thin fragments; pale gray in reflected light. *Luster:* Resinous.

Optical Class: Isotropic. $n = 1.97\text{--}1.98$

Cell Data: *Space Group:* n.d. $Z = \text{n.d.}$

X-ray Powder Pattern: Aleksandrovskii Golets deposit, Russia; heated, near U_3O_8 . 4.17 (10), 1.314 (6), 1.305 (6), 3.44 (5), 2.58 (5), 2.12 (5), 2.03 (5)

Chemistry:	(1)	(2)	(3)
SiO_2	4.56	4.56	
MoO_3	37.5	38.50	40.37
UO_3		32.35	34.38
UO_2		10.30	10.82
U_3O_8	42.32		
H_2O	15.4	14.03	14.43
Total	99.78	99.74	100.00

(1) Aleksandrovskii Golets deposit, Russia. (2) Do.; H_2O taken as loss on ignition.

(3) $\text{H}_4\text{U}^{4+}(\text{U}^{6+}\text{O}_2)_3(\text{MoO}_4)_7 \cdot 18\text{H}_2\text{O}$.

Occurrence: In fine fissures in granulated albite, in part replacing brannerite.

Association: Brannerite, molybdenite, chalcopyrite, galena, irignite.

Distribution: From the Aleksandrovskii Golets Mo–U deposit, upper Chetkanda River, Udokan Range, Chara region, northern Transbaikalia, Russia.

Name: For MOLybdenum and URANium in the composition.

Type Material: n.d.

References: (1) Getseva, R.V. and K.T. Salev'eva (1956) Handbook for the determination of uranium minerals. Moscow, 196 (in Russian). (2) Soboleva, M.V. and I.A. Pudovkina (1957) Uranium minerals handbook. Moscow, 252–253 (in Russian). (3) (1958) Amer. Mineral., 43, 378 and 380 (abs. refs. 1 and 2). (4) Epshtein, G.Y. (1959) On the molybdates of uranium – moluranite and iriginite. Zap. Vses. Mineral. Obshch., 88, 564–570 (in Russian). (5) (1960) Amer. Mineral., 45, 257–258 (abs. ref. 4).