

**Crystal Data:** n.d. *Point Group:* n.d. As dense, fine-grained aggregates.

**Physical Properties:** Hardness = n.d. D(meas.) = 4.90 D(calc.) = n.d.

**Optical Properties:** Semitransparent. *Color:* Orange.

*Optical Class:* Biaxial (+).  $\alpha = 1.897$   $\beta = 1.911$   $\gamma = 1.932$   $2V(\text{meas.}) = 81^\circ$

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

**X-ray Powder Pattern:** Russia.

3.089 (9), 1.676 (6), 1.283 (6), 3.425 (5), 1.986 (4), 1.944 (4), 1.915 (3)

**Chemistry:**

	(1)		(1)
UO <sub>3</sub>	76.91	CaO	4.86
As <sub>2</sub> O <sub>5</sub>	0.48	BaO	4.84
SiO <sub>2</sub>	1.0	Na <sub>2</sub> O	2.47
ZrO <sub>2</sub>	0.45	H <sub>2</sub> O <sup>+</sup>	3.78
Al <sub>2</sub> O <sub>3</sub>	0.25	H <sub>2</sub> O <sup>-</sup>	0.01
Fe <sub>2</sub> O <sub>3</sub>	0.44	CO <sub>2</sub>	1.80
PbO	2.29	Total	99.58

(1) Russia; corresponds to (Ca<sub>0.37</sub>Na<sub>0.31</sub>Ba<sub>0.24</sub>Pb<sub>0.08</sub>)<sub>Σ=1.00</sub>O·2.1UO<sub>3</sub>·1.7H<sub>2</sub>O.

**Occurrence:** In the oxidation zone of a U–Mo deposit, replacing “pitchblende”, and being replaced by uranophane.

**Association:** Uraninite, uranophane, bauranoite, calcouranoite, protasite.

**Distribution:** From an undisclosed locality [Streltsovskoe U–Mo deposit, eastern Transbaikal] in Russia.

**Name:** As a lower hydrate of *calcouranoite*.

**Type Material:** n.d.

**References:** (1) Rogova, V.P., L.N. Belova, G.N. Kiziyarov, and N.N. Kuznetsova (1973) Bauranoite and metacaltsuranoite [metacalcouranoite] – new minerals of the group of hydrous uranium oxides. *Zap. Vses. Mineral. Obshch.*, 102, 75–81 (in Russian). (2) (1973) *Amer. Mineral.*, 58, 1111 (abs. ref. 1).