

Crystal Data: Orthorhombic. *Point Group:* 2/m 2/m 2/m. Fibrous, or as elongated tablets, to 3 mm; in nodules.

Physical Properties: *Tenacity:* Flexible. Hardness = n.d. D(meas.) = n.d. D(calc.) = 4.67
Radioactive.

Optical Properties: Semitransparent. *Color:* Pale yellow. *Streak:* Yellowish white.
Luster: Silky.

Optical Class: Biaxial (+). *Orientation:* Z = c. $\alpha = 1.640(2)$ $\beta = 1.658(2)$ $\gamma = 1.760(2)$
2V(meas.) = n.d. 2V(calc.) = 47.7°

Cell Data: *Space Group:* *Immm* (probable). $a = 6.51(1)$ $b = 8.78(2)$ $c = 4.21(1)$
Z = 2

X-ray Powder Pattern: Shinkolobwe, Congo.
5.22 (100), 3.538 (80), 4.38 (50), 3.79 (50), 3.214 (50b), 2.756 (30), 2.669 (20)

Chemistry:	(1)	(2)
UO ₄	88.1	89.34
H ₂ O	~10.	10.66
Total		100.00

(1) Shinkolobwe, Congo; by electron microprobe, H₂O by TGA, considered very approximate.

(2) UO₄•2H₂O.

Occurrence: Extremely rare, on museum specimens of dolomite and uraninite, from the oxidized zone of a uranium deposit.

Association: Uraninite, uranophane, soddyite, uranopilite, fourmarierite, wölsendorfit, rutherfordine, becquerelite, masuyite, kasolite.

Distribution: From Shinkolobwe, Katanga Province, Congo (Shaba Province, Zaire).

Name: As a dehydration product of *studtite*.

Type Material: Royal Museum of Central Africa, Tervuren, Belgium, RGM13748 and RGM13755.

References: (1) Deliens, M. and P. Piret (1983) Metastudtite, UO₄•2H₂O, a new mineral from Shinkolobwe, Shaba, Zaire. *Amer. Mineral.*, 68, 456–458. (2) Walenta, K. (1974) On studtite and its composition. *Amer. Mineral.*, 59, 166–171.