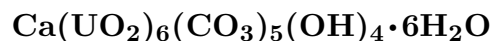


Sharpite



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Crystal Data: Orthorhombic. *Point Group:* n.d. Very fine needlelike crystals, to 5 mm, in subparallel aggregates, typically flat radial fibrous; may be in crusts.

Physical Properties: Hardness = 2.5–3 D(meas.) = > 4.45 D(calc.) = 4.61 Radioactive.

Optical Properties: Semitransparent. *Color:* Greenish yellow, olive-green, pale green, pale gray; pale yellow in transmitted light.

Optical Class: Biaxial (+). *Pleochroism:* Slight; X = Y = pale brown, very pale yellow-green; Z = pale yellow-green. *Orientation:* Y ⊥ laths; Z || elongation; positive elongation, parallel extinction. α = 1.632–1.638 β = close to α γ = 1.720–1.722 2V(meas.) = n.d.

Cell Data: *Space Group:* n.d. a = 21.99(2) b = 15.63(2) c = 4.487(4) Z = 2

X-ray Powder Pattern: Shinkolobwe, Congo.

4.497 (100), 3.910 (48), 7.82 (40), 5.34 (35), 2.996 (33), 11.02 (30), 6.37 (28)

Chemistry:

	(1)	(2)
UO ₃	81.04	80.33
CO ₂	10.30	10.30
CaO	2.70	2.62
H ₂ O	6.81	6.75
Total	100.85	100.00

(1) Shinkolobwe, Congo; contained insoluble cobalt oxide 1.6%; (CO₃)²⁻, H₂O confirmed by IR, TGA; corresponds to Ca_{1.02}(UO₂)_{6.01}(CO₃)_{4.96}(OH)_{4.14}•5.95H₂O. (2) Ca(UO₂)₆(CO₃)₅(OH)₄•6H₂O.

Occurrence: A very rare secondary mineral formed in the oxide zone of hydrothermal uranium deposits.

Association: Uranophane, becquerelite, schoepite, curite, masuyite, vandenbrandeite, ianthinite, uraninite.

Distribution: From Shinkolobwe, Katanga Province, Congo (Shaba Province, Zaire). In France, at Kruth, Haut-Rhin, and in the Brugeaud mine, near Bessines, Haute-Vienne.

Name: To honor Major Robert Richard Sharp (1881–1956), English engineer and prospector who discovered the Shinkolobwe deposit, Congo.

Type Material: University of Liège, Liège, Belgium, 6280, 16905.

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