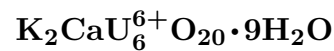


Rameauite



©2001-2005 Mineral Data Publishing, version 1

Crystal Data: Monoclinic, pseudo-hexagonal. *Point Group:* $2/m$ or m . As crystals, to 1 mm, pseudo-hexagonal in section, steep pyramidal, flattened on {010}, and elongated along [001], with {010}, {100}, {001}, and {110}. *Twining:* Universal, on {100}.

Physical Properties: *Cleavage:* Good on {010}. Hardness = n.d. D(meas.) = 5.60
D(calc.) = 5.55

Optical Properties: Semitransparent. *Color:* Orange.
Optical Class: Biaxial (-). *Orientation:* $X = b$; $Z \wedge c = 4^\circ\text{--}6^\circ$. $\alpha = \text{n.d.}$ $\beta = 1.95$ $\gamma = 1.97$
 $2V(\text{meas.}) = 32^\circ$

Cell Data: *Space Group:* $C2/c$ or Cc . $a = 13.97$ $b = 14.26$ $c = 14.22$ $\beta = 121^\circ 1(5)'$
 $Z = 4$

X-ray Powder Pattern: Margnac mine, France.
7.12 (vvs), 3.495 (vvs), 3.139 (vvs), 3.124 (vvs), 3.566 (vs), 3.473 (vs), 3.185 (vs)

Chemistry:	(1)
UO ₃	84.
CaO	2.4
SrO	0.0
BaO	0.0
K ₂ O	5.0
H ₂ O ⁺	8.2
Total	99.6

(1) Margnac mine, France; by electron microprobe, H₂O by TGA; corresponds to $\text{K}_{2.16}\text{Ca}_{0.87}\text{U}_{6.00}\text{O}_{20}\cdot 9.3\text{H}_2\text{O}$.

Occurrence: In the oxidation zone of uranium deposits.

Association: Calcite, uranophane, uraninite, "gummite".

Distribution: From the Margnac mine, Compreignac, Haute-Vienne, France. At Shinkolobwe, Katanga Province, Congo (Shaba Province, Zaire). Found in the Orphan mine, Grand Canyon, Coconino Co., Arizona, USA.

Name: For Jacques Rameau (?–1960), prospector for the French Atomic Energy Commission, Paris, France, who discovered the Margnac 2 deposit.

Type Material: University of Pierre and Marie Curie, Paris; National School of Mines, Paris, France; National Museum of Natural History, Washington, D.C., USA, 137454.

References: (1) Cesbron, F., W.L. Brown, P. Bariand, and J. Geffroy (1972) Rameauite and agrinierite, two new hydrated complex uranyl oxides from Margnac, France. *Mineral. Mag.*, 38, 781–789. (2) (1973) *Amer. Mineral.*, 58, 805 (abs. ref. 1).