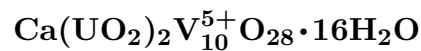


Rauvite

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Crystal Data: n.d. *Point Group:* n.d. Microcrystalline; a hardened gellike precipitate in massive botryoidal crusts and thin coatings.

Physical Properties: *Tenacity:* Sectile to brittle. Hardness = n.d. D(meas.) = 2.92 D(calc.) = n.d. Dehydrates on exposure forming a crackled surface.

Optical Properties: Semitransparent. *Color:* Purplish black, bluish black, brownish red, brownish yellow-orange. *Streak:* Yellowish brown to olive. *Luster:* Adamantine to waxy. *Optical Class:* Biaxial (-). $n = 1.88\text{--}1.95$

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

X-ray Powder Pattern: Temple Rock, Utah, USA.
10.7 (10), 2.95 (5), 3.49 (4), 2.62 (3), 3.87 (2), 5.83 (1), 2.22 (1)

Chemistry:	(1)	(2)	(3)
UO ₃	28.1	31.49	31.33
V ₂ O ₅	49.0	48.28	49.81
V ₂ O ₄	2.8	1.44	
Al ₂ O ₃		0.70	
CaO	2.7	2.76	3.07
H ₂ O	17.5	15.49	15.79
insol.		0.61	
Total	100.1	100.77	100.00

(1) Temple Rock, Utah, USA; recalculated after deduction of 27.06% impurities. (2) Monument No. 2 mine, Arizona, USA. (3) Ca(UO₂)₂V₁₀O₂₈•16H₂O.

Occurrence: An uncommon mineral in the oxidized zones of U–V ores in Colorado Plateau-type deposits.

Association: Carnotite, corvusite, uvanite, hewettite, metatorbernite, tyuyamunite, gypsum.

Distribution: In the USA, from Temple Rock and Flat Top, Emery Co., and at the Cactus Rat mine group, Yellow Cat district, 24 km southeast of Thompson, Grand Co., Utah; in Colorado, at the Small Spot, Arrowhead, and Corvusite mines, Gateway district, Mesa Co., at the Hummer, Bitter Creek, Jo Dandy, and J.J. mines, Paradox Valley, Montrose Co.; from the Monument No. 2 mine, Monument Valley, Apache Co., and Monument No. 1 and Mitten No. 2 mines, Navajo Co., Arizona; at the Road Hog No. 3A claim, Coal Canyon, Fall River Co., South Dakota. In the Hatrurim Formation, Israel.

Name: For the chemical elements Radium, Uranium, and Vanadium.

Type Material: Harvard University, Cambridge, Massachusetts, 134565; National Museum of Natural History, Washington, D.C., USA, 95060, R5715.

References: (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 1058. (2) Weeks, A.D. and M.E. Thompson (1954) Identification and occurrence of uranium and vanadium minerals from the Colorado Plateaus. U.S. Geol. Sur. Bull. 1009-B, 34–35. (3) Frondel, C. (1958) Systematic mineralogy of uranium and thorium. U.S. Geol. Sur. Bull. 1064, 263–264.