

Crystal Data: Monoclinic. *Point Group:* 2/m. As equant, flattened, or short prismatic crystals to 0.5 mm.

Physical Properties: *Cleavage:* Indistinct in one direction. *Tenacity:* Brittle. *Fracture:* Irregular. Hardness = 3 D(meas.) = 2.84(2) D(calc.) = 2.85

Optical Properties: Translucent. *Color:* Reddish brown. *Streak:* Orange brownish. *Luster:* Adamantine.

Optical Class: Biaxial (-). $\alpha = 1.925(5)$ $\beta = 1.960(10)$ $\gamma = 1.988(4)$ $2V(\text{meas.}) = 82^\circ$

Pleochroism: Weak, $X =$ brownish orange with distinct reddish tint, $Y =$ brownish orange, $Z =$ brownish orange. *Absorption:* $X \approx Y \approx Z$. Thick crystals pleochroic in dark red-orange.

Cell Data: *Space Group:* $P2_1/n$. $a = 8.183(3)$ $b = 9.247(3)$ $c = 8.651(2)$ $\beta = 109.74(2)^\circ$ $Z = 2$

X-ray Powder Pattern: Ronneburg U deposit, near Gera, Thuringia, Germany. 3.336 (100), 2.752 (68), 2.878 (64), 3.701 (55), 3.118 (50), 3.000 (36), 5.509 (32)

Chemistry:	(1)
K ₂ O	16.93
MnO	12.44
MgO	0.62
<u>V₂O₅</u>	<u>68.54</u>
Total	98.53

(1) Ronneburg U deposit, near Gera, Thuringia, Germany; average electron microprobe analysis supplemented by IR spectroscopy; corresponding to K_{1.91}Mn_{0.93}Mg_{0.08}V_{4.00}O_{11.96}.

Occurrence: A secondary mineral in a metamorphosed black shale uranium deposit.

Association: Hummerite, gypsum, epsomite, picromerite, hematite, an unidentified K-Mg-Mn-vanadate.

Distribution: From the Ronneburg U deposit, near Gera, Thuringia, Germany.

Name: For the *Ronneburg* uranium deposit, Germany.

Type Material: Mineralogical Collection, Bergakademie, Freiberg, Germany (78908).

References: (1) Witzke T., S. Zhen, K. Seff, T. Doering, L. Nasdala, and U. Kolitsch (2001) Ronneburgite, K₂MnV₄O₁₂, a new mineral from Ronneburg, Thuringia, Germany: description and crystal structure. *Amer. Mineral.*, 86, 1081-1086.