

Crystal Data: Tetragonal. *Point Group:* 4/*m*. Crystals, euhedral to subhedral, prismatic, with {100} and {110}, to 1 mm.

Physical Properties: *Cleavage:* Interrupted ⊥ elongation, possibly a parting.
Fracture: Uneven. *Tenacity:* Brittle. *Hardness* = n.d. VHN = 874 (50 g load).
 D(meas.) = 4.44 D(calc.) = 4.389

Optical Properties: Opaque. *Color:* Black; in reflected light, light rose-reddish gray.
Streak: Grayish black. *Luster:* Vitreous to adamantine.
Optical Class: Uniaxial. *Pleochroism:* *O* = pinkish gray; *E* = light pink. *Orientation:* *E* = *c*.
Anisotropism: Distinct. *Birefractance:* Weak to distinct.
 R₁–R₂: (589) 12.8–20.1

Cell Data: *Space Group:* I4/*m*. *a* = 10.139(4) *c* = 2.961(2) *Z* = 1

X-ray Powder Pattern: Ankang Co., China.
 3.202 (10), 2.476 (7), 1.589 (7), 3.580 (5), 2.233 (5), 1.892 (5), 1.685 (5)

Chemistry:	(1)
	TiO ₂ 54.0891
	V ₂ O ₃ 22.3242
	Cr ₂ O ₃ 2.0792
	BaO 20.5927
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	Total 99.0852

(1) Ankang Co., China; by electron microprobe, V³⁺ verified by X-ray photoelectron spectroscopy; corresponding to Ba_{1.09}(Ti_{5.48}V_{2.41}Cr_{0.22})_{Σ=8.11}O₁₆.

Mineral Group: Cryptomelane group.

Occurrence: In a quartz vein.

Association: Barite, barytocalcite, roscoelite, diopside.

Distribution: From the Shiti barite deposit, Ankang Co., Shaanxi Province, China.

Name: For Ankang Co., Shaanxi Province, China, where it occurs.

Type Material: n.d.

References: (1) Xiong Ming, Ma Zhesheng, and Peng Zhizhong (1989) A new mineral – ankangite. *Chinese Science Bull.*, 34(7), 592–596. (2) (1991) *Amer. Mineral.*, 76, 2020 (abs. ref. 1). (3) Wu, X.J., Li, F.H., and H. Hashimoto (1990) Electron microscope study of the incommensurately modulated structure of ankangite. *Acta Cryst.*, 46, 111–117. (4) Shi Nicheng, Ma Zhesheng, and Liu Wei (1991) Crystal structure determination of ankangite with one-dimensional incommensurate modulation. *Acta. Petrolog. Mineral.*, 10(8), 233–245 (in Chinese with English abs.). (5) (1992) *Amer. Mineral.*, 77, 1119 (abs. ref. 4).