

**Crystal Data:** Monoclinic. *Point Group:* 2/m. As equant or short prismatic crystals to 0.3 mm.

**Physical Properties:** *Cleavage:* None. *Tenacity:* Brittle. *Fracture:* Uneven. Hardness = 3.5  
D(meas.) = 3.17(1) D(calc.) = 3.16

**Optical Properties:** Translucent. *Color:* Dark brown to dark greenish black. *Streak:* Olive-green.  
*Luster:* Adamantine.

*Optical Class:* Biaxial.  $\alpha = 1.75(1)$   $\beta = 1.79(1)$   $\gamma = >1.79$  2V(meas.) = n.d.  
*Pleochroism:* Dark brown to olive greenish brown.

**Cell Data:** *Space Group:* C2/c.  $a = 6.914(2)$   $b = 7.468(2)$   $c = 7.364(2)$   $\beta = 112.29(3)^\circ$   $Z = 4$

**X-ray Powder Pattern:** Alto Serra Branca pegmatite, Paraiba State, Brazil.  
3.503 (100), 2.516 (19), 4.633 (15), 4.856 (12), 2.104 (12), 3.271 (10), 2.957 (10)

Chemistry:	(1)	(2)
Mn <sub>2</sub> O <sub>3</sub>	46.85	47.01
P <sub>2</sub> O <sub>5</sub>	42.72	42.27
<u>H<sub>2</sub>O</u>	<u>9.80</u>	<u>10.72</u>
Total	99.37	100.00

(1) Alto Serra Branca pegmatite, Paraiba State, Brazil; average electron microprobe analysis, H<sub>2</sub>O by TGA; corresponding to Mn<sub>0.98</sub>P<sub>1.00</sub>O<sub>3.98</sub>·0.90H<sub>2</sub>O.

**Occurrence:** A secondary alteration product of triplite in a granitic pegmatite.

**Association:** Vernadite, phosphosiderite.

**Distribution:** From the Alto Serra Branca granitic pegmatite, ~10 km southwest of the village Pedra Lavrada, Paraiba State, Brazil.

**Name:** For the Alto *Serra Branca* granitic pegmatite, Brazil.

**Type Material:** Mineral Collection, Bergakademie, Freiberg, Germany (78025) and the Mineral Collection, Martin-Luther Universität Halle, Geoscience Institute, Germany (010355).

**References:** (1) Witzke T, R. Wegner, T. Doering, H. Pöllmann, and W. Schuckmann (2000) Serrabrancaite, MnPO<sub>4</sub>·H<sub>2</sub>O, a new mineral from the Alto Serra Branca pegmatite, Pedra Lavrada, Paraiba, Brazil. *Amer. Mineral.*, 85, 847-849.