

# Mpororoite

# WAlO<sub>3</sub>(OH)<sub>3</sub>·2H<sub>2</sub>O

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**Crystal Data:** Triclinic (?). *Point Group:* n.d. Platy, very fine grained, powdery.

**Physical Properties:** Hardness = n.d. D(meas.) = n.d. D(calc.) = n.d.

**Optical Properties:** Semitransparent. *Color:* Greenish yellow.

*Optical Class:* Biaxial.  $\alpha$  = n.d.  $\beta$  = n.d.  $\gamma$  = n.d. 2V(meas.) = n.d.

**Cell Data:** *Space Group:* n.d.  $a = 9.40$   $b = 11.46$   $c = 8.20$   $\alpha = 94^\circ 20'$   $\beta = 89^\circ 45'$   
 $\gamma = 95^\circ 10'$   $Z = \text{n.d.}$

**X-ray Powder Pattern:** Mpororo deposit, Uganda.

8.21 (100), 3.084 (90b), 4.09 (19), 5.69 (18), 4.20 (17), 6.18 (16), 2.357 (15)

## Chemistry:

	(1)	(2)
WO <sub>3</sub>	66.90	67.03
Al <sub>2</sub> O <sub>3</sub>	8.22	14.74
Fe <sub>2</sub> O <sub>3</sub>	9.78	
CaO	0.27	
H <sub>2</sub> O <sup>+</sup>	7.97	
H <sub>2</sub> O <sup>-</sup>	6.89	
H <sub>2</sub> O		18.23
Total	100.03	100.00

(1) Mpororo deposit, Uganda; corresponding to  $W_{1.00}(Al_{0.57}Fe_{0.43}^{3+})_{\Sigma=1.00}O_3(OH)_3 \cdot 2H_2O$ .

(2) WAlO<sub>3</sub>(OH)<sub>3</sub>·2H<sub>2</sub>O.

**Occurrence:** An alteration product of primary tungsten minerals.

**Association:** Scheelite, ferberite, ferritungstite (Mpororo deposit, Uganda); anthoinite (Kara mine, Tasmania); scheelite, ferberite, ferritungstite, russellite, anthoinite (Kalzas Mountain, Canada).

**Distribution:** In the Mpororo tungsten deposit, 20 km north of Kisoro, Kigezi district, Uganda. At the Kara tungsten mine, southwest of Burnie, Tasmania, Australia. From the Flo property, Kalzas Mountain, 67 km southeast of Mayo, Yukon Territory, Canada. In the Hingston Down quarry, Calstock, Cornwall, England.

**Name:** For the Mpororo deposit, Uganda, where it was first found.

**Type Material:** n.d.

**References:** (1) von Knorring, O., T.G. Sahama, and M. Lehtinen (1972) Mpororoite, a new secondary tungsten mineral from Uganda. Bull. Geol. Soc. Finland, 44, 107–110. (2) (1973) Amer. Mineral., 58, 1112 (abs. ref. 1). (3) Sahama, T.G. (1981) The secondary tungsten minerals, a review. Mineral. Record, 12, 81–87. (4) Matsubara, S., A. Kato, and K. Nagashima (1984) Mpororoite and anthoinite from the Kara mine, Tasmania. Mineral. Mag., 48, 397–400.