

# Kimrobinsonite



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**Crystal Data:** Cubic. *Point Group:* n.d. In masses of cryptocrystalline individuals.

**Physical Properties:** *Tenacity:* Friable. Hardness = Soft. VHN = 70 (20 g load).  
D(meas.) = n.d. D(calc.) = 6.865

**Optical Properties:** Semitransparent. *Color:* White. *Streak:* White. *Luster:* Dull chalky.  
*Optical Class:* Isotropic.  $n = [2.23]$  (by rule of Gladstone and Dale).

**Cell Data:** *Space Group:* n.d.  $a = 3.812(1)$   $Z = 1$

**X-ray Powder Pattern:** Mt. Holland, Western Australia.  
3.808 (10), 2.696 (7), 1.702 (5), 1.555 (4), 1.907 (3), 2.202 (2), 1.270 (2)

<b>Chemistry:</b>	(1)
	Nb <sub>2</sub> O <sub>5</sub> 6.6
	Ta <sub>2</sub> O <sub>5</sub> 78.5
	Sb <sub>2</sub> O <sub>3</sub> 0.7
	FeO 0.4
	Na <sub>2</sub> O 0.7
	H <sub>2</sub> O [8.9]
	CO <sub>2</sub> [4.2]
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	Total [100.0]

(1) Mt. Holland, Western Australia; by electron microprobe, H<sub>2</sub>O 5.9% and CO<sub>2</sub> 2.8% by CHN microanalysis on a somewhat impure sample, recalculated to 100% for analytical shortfall of volatiles; then corresponding to (Ta<sub>0.82</sub>Nb<sub>0.11</sub>Na<sub>0.05</sub>Fe<sub>0.01</sub>Sb<sub>0.01</sub>)<sub>Σ=1.00</sub>(OH)<sub>2.27</sub>[O<sub>1.02</sub>(CO<sub>3</sub>)<sub>0.22</sub>]<sub>Σ=1.24</sub>.

**Occurrence:** The weathering product of an undetermined Ta–Sb pegmatite mineral.

**Association:** Cesstibtantite, manganotantalite, antimonian microlite.

**Distribution:** From near Mt. Holland, Western Australia.

**Name:** Honors Kim Robinson (1951–), Australian geologist of Perth, Australia, who discovered the specimen in which the mineral occurs.

**Type Material:** Western Australian Museum, Perth, M.59.1991; Museum Victoria, Melbourne, Australia, M37922; The Natural History Museum, London, England, 1986.250; National School of Mines, Paris, France; National Museum of Natural History, Washington, D.C., USA, 163342.

**References:** (1) Nickel, E.H. and B.W. Robinson (1985) Kimrobinsonite, a new tantalum mineral from Western Australia, and its association with cesstibtantite. *Can. Mineral.*, 23, 573–576. (2) (1987) *Amer. Mineral.*, 72, 1024 (abs. ref. 1).