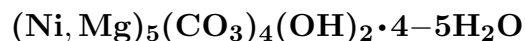


Widgiemoolthalite



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Crystal Data: Monoclinic, pseudo-orthorhombic. *Point Group:* $[2/m.]$ Radiating fibrous spheroids, to 3 mm, and in felted masses.

Physical Properties: *Tenacity:* Brittle. Hardness = n.d. $D(\text{meas.}) = 3.13(1)$
 $D(\text{calc.}) = 3.24$

Optical Properties: Semitransparent. *Color:* Bluish green, grass-green; bluish green in transmitted light. *Streak:* Pale bluish green. *Luster:* Silky.
Optical Class: Biaxial (+). *Orientation:* Length-fast. $\alpha = 1.630(5)$ $\beta = \text{n.d.}$ $\gamma = 1.640(5)$
 $2V(\text{meas.}) = \text{Large.}$

Cell Data: *Space Group:* $[P2_1/c]$ (by analogy to hydromagnesite). $a = 10.06(17)$
 $b = 8.75(5)$ $c = 8.32(4)$ $\beta = 114.4(8)^\circ$ $Z = 2$

X-ray Powder Pattern: 132 North nickel mine, Western Australia.
5.75 (10), 6.30 (5), 4.36 (4), 2.871 (4), 4.14 (3), 2.120 (3), 2.458 (2)

Chemistry:	(1)
	CO ₂ 28.9
	NiO 54.6
	MgO 2.4
	H ₂ O 17.0
	<hr/>
	Total 102.9

(1) 132 North nickel mine, Western Australia; by electron microprobe, average of 14 analyses, CO₂ and H₂O determined by CHN analyzer; corresponds to $(\text{Ni}_{4.62}\text{Mg}_{0.38})_{\Sigma=5.00}(\text{CO}_3)_{4.15}(\text{OH})_{1.70} \cdot 5.12\text{H}_2\text{O}$.

Occurrence: In a stockpile of weathered ore from a hydrothermal nickel deposit.

Association: Gaspéite.

Distribution: From the 132 North nickel mine, 4 km southwest of Widgiemooltha, Western Australia.

Name: For its occurrence near Widgiemooltha, Western Australia.

Type Material: Western Australian Museum, Perth, Australia, M.1.1993.

References: (1) Nickel, E.H., B.W. Robinson, and W.G. Mumme (1993) Widgiemoolthalite: the new nickel analogue of hydromagnesite from Western Australia. *Amer. Mineral.*, 78, 819–821.