Parachrysotile $Mg_3Si_2O_5(OH)_4$

Crystal Data: Orthorhombic. *Point Group:* n.d. Fibrous along [010]; asbestiform.

Physical Properties: Hardness = 2.5 (?) D(meas.) = ~2.55 D(calc.) = [2.56]

Optical Properties: Semitransparent. *Color:* Yellow, white, gray, green [for chrysotile].
Luster: Silky in aggregates.
Optical Class: [Biaxial.] α = 1.532–1.549 [for chrysotile]. β = n.d. γ = 1.545–1.556
2V(meas.) = n.d.

Cell Data: *Space Group:* n.d. $a = 5.3$ $b = 9.24(2)$ $c = 14.7(1)$ Z = [4]

X-ray Powder Pattern: n.d.

Chemistry: Compositional data is lacking.

Polymorphism & Series: Antigorite, clinochrysotile, lizardite, and orthochrysotile are polymorphs.

Mineral Group: Kaolinite-serpentine group.

Occurrence: A minor component of many serpentines.

Association: Clinochrysotile, orthochrysotile.

Distribution: Widespread, probably, but requires careful characterization. From the Jeffrey mine, Asbestos, Quebec, Canada. At Shabani, Zimbabwe.

Name: From the Greek *para*, for *near*, and *chrysotile* from *golden* and *fiber*.

Type Material: n.d.

References: (1) Whittaker, E.J.W. and J. Zussman (1956) The characterization of serpentine minerals by X-ray diffraction. Mineral. Mag., 31, 107–126. (2) (1957) Amer. Mineral., 42, 585 (abs. ref. 1). (3) Whittaker, E.J.W. (1956) The structure of chrysotile. IV. Para-chrysotile. Acta Cryst., 9, 865–867. (4) Deer, W.A., R.A. Howie, and J. Zussman (1963) Rock-forming minerals, v. 3, sheet silicates, 170–190. (5) Middleton, A.P. and E.J.W. Whittaker (1979) The nature of parachrysotile. Can. Mineral., 17, 693–697.