Diomignite

Crystal Data: Tetragonal, pseudocubic. *Point Group*: 4mm. As pseudocubic crystals, to 30 μm, bounded by \{111\} and \{100\}; also anhedral.


Optical Properties: Transparent. *Color*: Colorless. *Optical Class*: Uniaxial (−). \(n = \sim1.6\) \(\omega = 1.612(2)\) (synthetic) \(\epsilon = 1.554(2)\)

Cell Data: *Space Group*: I4₁cd. \(a = 9.470(4)\) \(c = 10.279(5)\) \(Z = 8\)

X-ray Powder Pattern: Tanco pegmatite, Canada. 4.07 (100), 2.662 (60), 3.495 (50), 2.587 (40), 2.045 (40), 3.908 (20), 2.240 (20)

Chemistry: Analyses by electron microprobe indicate all elements are atomic weight < 11; identification is by inference of other properties to synthetic \(\text{Li}_2\text{B}_4\text{O}_7\).

Occurrence: Abundant in fluid inclusions in spodumene crystallized from a late-stage hydrothermal fluid in a granite pegmatite.

Association: Albite, cookeite, quartz, pollucite–analcime, microlite, all as daughter species in fluid inclusions.

Distribution: From the Tanco pegmatite, Bernic Lake, Manitoba, Canada.

Name: From the Greek meaning *divine mix*, in allusion to its likely pronounced fluxing effects.
