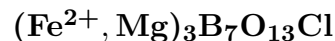


Congolite



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Crystal Data: Hexagonal. *Point Group:* $3m$. As grains, to 0.2 mm.

Physical Properties: Hardness = 7 $D(\text{meas.}) = 3.58$ $D(\text{calc.}) = [3.52]$

Optical Properties: Transparent. *Color:* Pink.

Optical Class: Uniaxial (-). $\omega = 1.755(5)$ $\epsilon = 1.731(2)$

Cell Data: *Space Group:* $R3c$. $a = 8.6225(15)$ $c = 21.054(5)$ $Z = 6$

X-ray Powder Pattern: Brazzaville, Congo.

2.725 (100), 3.05 (80), 2.061 (75), 2.058 (75), 1.838 (70), 1.834 (70), 2.158 (60)

Chemistry:

	(1)
B ₂ O ₃	[56.42]
FeO	25.54
MnO	0.26
MgO	13.52
Cl	7.83
-O = Cl ₂	1.77
Total	[101.80]

(1) Penobsquis mine, Canada; by electron microprobe, B₂O₃ calculated for stoichiometry; corresponds to $(\text{Fe}_{1.55}\text{Mg}_{1.45})_{\Sigma=3.00}\text{B}_7\text{O}_{13}\text{Cl}_{0.95}$.

Polymorphism & Series: Dimorphous with ericaite.

Occurrence: Part of insoluble residue from a drill core into sedimentary evaporites (Brazzaville, Congo); in a marine evaporite deposit (Penobsquis mine, Canada).

Association: Anhydrite, halite (Brazzaville, Congo).

Distribution: From Brazzaville, Congo. In the Penobsquis evaporite deposit, near Sussex, New Brunswick, Canada. At Bischofferode, Thuringia, Germany.

Name: For Congo, the country in which the first specimens were collected.

Type Material: n.d.

References: (1) Wendling, E., R. von Hodenberg, and R. Kühn (1972) Congolit, der trigonale Eisenboracit. Kali und Steinsalz, 6, 1-3 (in German). (2) (1972) Amer. Mineral., 57, 1315 (abs. ref. 1). (3) Burns, P.C. and M.A. Carpenter (1996) Phase transitions in the series boracite - trembathite - congolite: phase relations. Can. Mineral., 34, 881-892.