

Parabariomicrolite**BaTa₄O₁₀(OH)₂•2H₂O**

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Crystal Data: Hexagonal, pseudocubic. *Point Group:* $\bar{3}2/m, 3m,$ or $32.$ Individual crystals, to 0.1 mm, topotactically replacing microlite crystals, to 1 cm; less commonly as open-space fillings. *Twining:* Possibly due to the topotactic replacement.

Physical Properties: *Cleavage:* {001} and {101}, good. *Tenacity:* Brittle. Hardness = 4
D(meas.) = n.d. D(calc.) = 5.97

Optical Properties: Translucent. *Color:* White to pale pink. *Streak:* White.
Luster: Vitreous to pearly.

Optical Class: Uniaxial. $\omega = > 2.0$ $\epsilon = > 2.0$

Cell Data: *Space Group:* $R\bar{3}m, R3m,$ or $R32.$ $a = 7.4290(6)$ $c = 18.505(2)$ $Z = 3$

X-ray Powder Pattern: Alto do Giz pegmatite, Brazil; after removal of lines due to microlite contaminant.

3.040 (100), 3.172 (65), 6.18 (50), 2.641 (50), 1.591 (42), 3.085 (41), 1.857 (39)

Chemistry:

	(1)	(2)
Nb ₂ O ₅	1.5	
Ta ₂ O ₅	80.6	81.00
PbO	0.4	
CaO	0.0	
SrO	0.8	
BaO	10.5	14.05
Na ₂ O	0.4	
K ₂ O	0.3	
H ₂ O		4.95
H ₂ O + F	[5.5]	
Total	[100.0]	100.00

(1) Alto do Giz pegmatite, Brazil; by electron microprobe, H₂O + F by difference; corresponding to (Ba_{0.73}Na_{0.13}Sr_{0.08}K_{0.07}Pb_{0.02})_{Σ=1.03}(Ta_{3.88}Nb_{0.12})_{Σ=4.00}O₁₀(OH)₂•2H₂O.

(2) BaTa₄O₁₀(OH)₂•2H₂O.

Occurrence: An alteration product of microlite crystals, in a decomposed zoned pegmatite.

Association: Microlite, simpsonite, tantalite, manganotantalite, tapiolite, natrotantite, almotantite, stibiotantalite, beryl, spodumene, petalite.

Distribution: In the Alto do Giz pegmatite, near Parelhas, Rio Grande do Norte, Brazil.

Name: From the Greek for *near* and its relation to *bariomicrolite*.

Type Material: Royal Ontario Museum, Toronto, Canada, M22607; National Museum of Natural History, Washington, D.C., USA, 104739.

References: (1) Ercit, T.S., F.C. Hawthorne, and P. Černý (1986) Parabariomicrolite, a new species, and its structural relationship to the pyrochlore group. *Can. Mineral.*, 24, 655–663.

(2) (1988) *Amer. Mineral.*, 73, 194 (abs. ref. 1).