

Crystal Data: Hexagonal. *Point Group:* 6/m 2/m 2/m. As an epitaxial intergrowth with the {0001} of bosoite parallel to {111} of chibaite.

Physical Properties: *Cleavage:* None. *Tenacity:* Brittle. *Fracture:* Irregular. Hardness = 6.5-7 D(meas.) = n.d. D(calc.) = 2.04 Nonfluorescent.

Optical Properties: Transparent. *Color:* Colorless. *Streak:* White. *Luster:* Vitreous. *Optical Class:* Uniaxial (+). *n* = slightly greater than 1.470

Cell Data: *Space Group:* P6/mmm. *a* = 13.9020(3) *c* = 11.2802(2) *Z* = 34

X-ray Powder Pattern: Arakawa, Minami-boso City, Chiba Prefecture, Japan. 5.301 (100), 3.535 (62), 3.73 (44), 3.303 (42), 3.331 (38), 5.100 (33), 5.907 (30)

Chemistry:	(1)	(2)
SiO ₂	86.38	88.22
Al ₂ O ₃	1.63	
Na ₂ O	0.34	
CH ₄ /C ₂ H ₆ /C ₃ H ₈	[11.65]	11.78
Total	100.00	100.00

(1) Arakawa, Minami-boso City, Chiba Prefecture, Japan; average electron microprobe analysis supplemented by Raman spectroscopy, total carbon as CH₄/C₂H₆/C₃H₈ by difference; corresponds to Na_{0.01}(Si_{0.98}Al_{0.02})_{Σ=1.00}O₂·0.50CH₄. (2) SiO₂·0.50CH₄.

Occurrence: Formed under low-temperature conditions during diagenesis of tuffaceous forearc sandstone and mudstone.

Association: Chibaite, quartz, calcite.

Distribution: At Arakawa, Minami-boso City, Chiba Prefecture, Japan.

Name: For the *Boso* Peninsula, east of Tokyo across Tokyo Bay.

Type Material: National Museum of Nature and Science, Japan (NMS-M43775) and the Tohoku University Museum, Aoba, Sendai, Japan (A-153).

References: (1) Momma, K., T. Ikeda, T. Nagase, T. Kuribayashi, C. Honma, A. Nishikubo, N. Takahashi, M. Takada, Y. Matsushita, R. Miyawaki, and S. Matsubara (2020) Bosoite, a new silica clathrate mineral from Chiba Prefecture, Japan. *Mineral. Mag.*, 84, 941-948.