

Crystal Data: Hexagonal. *Point Group:* 3m. As a corroded grain (3 mm).

Physical Properties: *Cleavage:* None. *Fracture:* Conchoidal. *Tenacity:* Brittle.
D(meas.) = n.d. D(calc.) = 2.366 *Hardness* = 7 Fluoresces pale yellow in SW and LW UV.

Optical Properties: Transparent. *Color:* Colorless. *Streak:* White. *Luster:* Vitreous.
Optical Class: Uniaxial (-). $\omega = 1.500(2)$ $\epsilon = 1.488(2)$

Cell Data: *Space Group:* P31c. $a = 12.6678(5)$ $c = 10.3401(4)$ $Z = 2$

X-ray Powder Pattern: Mount Koashva, Khibina alkaline massif, Kola Peninsula, Russia.
4.689(100), 3.249(100), 6.378(80), 2.661(80), 3.867(70), 3.664(70), 2.117 (60)

Chemistry:	(1)	(2)
Na ₂ O	22.66	24.06
K ₂ O	1.75	
SiO ₂	35.74	34.99
Al ₂ O ₃	30.42	29.69
CO ₂	4.37	4.27
H ₂ O	6.26	6.99
Total	101.20	100.00

(1) Mount Koashva, Khibina alkaline massif, Kola Peninsula, Russia; electron microprobe analysis supplemented by IR spectroscopy, H₂O and CO₂ calculated from stoichiometry; corresponds to (Na_{7.40}K_{0.38})_{Σ=7.78}(Al_{6.04}Si_{6.02})_{Σ=12.06}O₂₄(CO₃)·3.5H₂O. (2) Na₈[Al₆Si₆O₂₄](CO₃)·4H₂O.

Mineral Group: Cancrinite group.

Occurrence: From zoned hyperagpaitic pegmatite in an ijolite-urtite body near its contact with apatite-nepheline rocks and apparently crystallized from residual peralkaline pegmatite-forming melt or solution.

Association: Sodalite, megakalsilite, natrite, bitumen.

Distribution: From Mount Koashva, Khibina alkaline massif, Kola Peninsula, Russia.

Name: For the compositional relationship with *bystrite* {(Na,K)₇Ca[Al₆Si₆O₂₄](S)_{1.5}·H₂O} and the essential role of CO₃ in the compound. It is a K-deficient, (CO₃), and Na analogue of bystrite.

Type Material: A.E. Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia (#3836).

References: (1) Khomyakov, A.P., F. Cámara, and E. Solokova (2010) Carbobystrite, Na₈[Al₆Si₆O₂₄](CO₃)·4H₂O, a new cancrinite-group mineral species from the Khibina alkaline massif, Kola Peninsula, Russia: description and crystal structure. *Can. Mineral.*, 48, 291-300.
(2) (2011) *Amer. Mineral.*, 96, 939 (abs. ref. 1).