

Crystal Data: Cubic. *Point Group:* 23. As irregular grains, to 5 mm.

Physical Properties: *Cleavage:* On {100}, distinct. *Fracture:* Semiconchoidal.
Tenacity: Brittle. Hardness = ~2 D(meas.) = 2.3 D(calc.) = 2.26 Readily dehydrates in air; partly decomposed in H₂O. Fluoresces pale violet under UV.

Optical Properties: Transparent, turbid with alteration. *Color:* Colorless, snow-white with alteration. *Luster:* Dull vitreous [sic].
Optical Class: Isotropic. $n = 1.504(1)$

Cell Data: *Space Group:* P2₁3. $a = 10.711(9)$ $Z = 4$

X-ray Powder Pattern: Mt. Yukspor, Kola Peninsula, Russia.
 2.598 (10), 2.866 (9), 5.36 (8), 4.81 (8), 2.102 (8), 3.575 (7), 3.794 (6)

Chemistry:	(1)	(2)
P ₂ O ₅	18.86	17.00
CaO	0.04	
SrO	0.86	
BaO	37.00	36.74
Na ₂ O	6.31	7.42
H ₂ O	36.94	38.84
Total	[100.01]	100.00

(1) Mt. Yukspor, Kola Peninsula, Russia; by electron microprobe, average of three analyses, recalculated to 100%, H₂O by TGA; corresponding to Na_{0.80}(Ba_{0.95}Sr_{0.03})_{Σ=0.98}P_{1.05}O₄•8.07H₂O.
 (2) NaBaPO₄•9H₂O.

Occurrence: A rare late-stage hydrothermal mineral in cavities in ijolite-urtite pegmatite in a differentiated alkalic massif.

Association: Natrolite, pectolite, shcherbakovite, wadeite, eudialyte, lamprophyllite, ferrian biotite, aegirine, microcline.

Distribution: On Mt. Yukspor, Khibiny massif, Kola Peninsula, Russia.

Name: For sodium, NAtrium, BArium, and PHosphorus in the composition.

Type Material: Geology Museum, Kola Branch, Academy of Sciences, Apatity, 5713/2; Mining Institute, St. Petersburg, 1635/1; A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia, 80819.

References: (1) Khomyakov, A.P., M.F. Korobitsyn, Y.P. Men'shikov, and L.I. Polezhaeva (1982) Nabaphite, NaBaPO₄•9H₂O, a new mineral. Doklady Acad. Nauk SSSR, 266, 707–710 (in Russian). (2) Baturin, S.V., Y.A. Malinovskii, and N.V. Belov (1982) Crystal structure of nabaphite, NaBaPO₄•9H₂O. Doklady Acad. Nauk SSSR, 266, 624–627 (in Russian). (3) (1983) Amer. Mineral., 68, 643–644 (abs. refs. 1 and 2). (4) (1983) Mineral. Abs., 34, 348 and (1987) Mineral. Abs., 38, 531 (abs. ref. 1).