

Crystal Data: Monoclinic. *Point Group:* $2/m$ or 2 . As elongate grains, to 4 μm ; in powdery, earthy to compact porcelaneous masses.

Physical Properties: Hardness = Very soft; 1–3 if porcelaneous. $D(\text{meas.}) = \text{n.d.}$
 $D(\text{calc.}) = 2.60$ Extremely soluble in H₂O.

Optical Properties: Translucent. *Color:* White; colorless in transmitted light. *Luster:* Dull.
Optical Class: [Biaxial.] *Orientation:* Length-fast, nearly parallel extinction. *Dispersion:* $r < v$,
(synthetic). $\alpha = 1.490$ $\beta = \text{n.d.}$ $\gamma = 1.505$ $2V(\text{meas.}) = 80^\circ$ (synthetic).

Cell Data: *Space Group:* $P2_1/m$ or $P2_1$. $a = 5.47(1)$ $b = 6.84(1)$ $c = 5.45(1)$
 $\beta = 116.33(8)^\circ$ $Z = 2$

X-ray Powder Pattern: Big Fish River area, Canada.
2.803 (100), 2.720 (70), 3.84 (55), 3.97 (45), 2.868 (30), 3.41 (25), 2.650 (15)

Chemistry:	(1)	(2)
P ₂ O ₅	49.54	49.99
Na ₂ O	43.67	43.66
H ₂ O	[6.32]	6.35
Total	[99.53]	100.00

(1) Big Fish River area, Canada; colorimetric and AA analysis, H¹⁺ calculated for charge balance.

(2) Na₂HPO₄.

Occurrence: An alteration product of maričite in nodules in phosphatic ironstone (Yukon Territory, Canada); in sodalite xenoliths associated with an intrusive alkalic gabbro-syenite complex (Mont Saint-Hilaire, Canada); in differentiated alkalic massifs (Kola Peninsula, Russia).

Association: Maričite (Yukon Territory, Canada); natrophosphate, villiaumite (Kola Peninsula, Russia).

Distribution: From the Big Fish River area, Yukon Territory, and at Mont Saint-Hilaire, Quebec, Canada. On Mt. Karnasurt, Lovozero massif and on Mt. Rasvumchorr, Khibiny massif, Kola Peninsula, Russia.

Name: For the principal chemical components, sodium, NAtrium, Hydrogen, Phosphorus, and Oxygen.

Type Material: University of Saskatchewan, Saskatoon, Canada, 12504.

References: (1) Coleman, L.C. and B.T. Robertson (1981) Nahpoite Na₂HPO₄, a new mineral from the Big Fish River area, Yukon, Territory. *Can. Mineral.*, 19, 373–376. (2) (1982) *Amer. Mineral.*, 67, 856–857 (abs. ref. 1). (3) Khomyakov, A.P., Y.P. Men'shikov, and M.D. Dorfman (1982) New natural sodium phosphate, nahpoite (Na₂HPO₄), from the Lovozero and the Khibiny plutons. *Doklady Acad. Nauk SSSR*, 264, 191–194 (in Russian).