

Crystal Data: Cubic. *Point Group:* $2/m\bar{3}$. Crystals are pseudo-octahedral, {111} and $\{\bar{1}11\}$, to 4 mm. *Twinning:* On {111}.

Physical Properties: Hardness = n.d. D(meas.) = 3.250 (synthetic). D(calc.) = 3.24
Easily soluble in H₂O; piezoelectric.

Optical Properties: Transparent. *Color:* Colorless, partially brownish black from included “wad”; colorless in transmitted light. *Luster:* Vitreous.

Optical Class: Isotropic, may be anomalously birefringent in sectors. $n = 1.5714$

Cell Data: *Space Group:* $Pa\bar{3}$ (synthetic). $a = 8.1184$ $Z = 4$

X-ray Powder Pattern: Synthetic.

4.689 (100), 2.447 (75), 2.344 (45), 4.062 (35), 2.870 (30), 1.863 (20), 3.633 (14)

Chemistry: (1) Only a qualitative analysis of natural material was made.

Occurrence: Noted on a museum specimen, probably from a nitrate deposit.

Association: “Wad”.

Distribution: From Chile, the exact locality not specified.

Name: For NITRate and BARium in the composition.

References: (1) Palache, C., H. Berman, and C. Frondel (1951) Dana’s system of mineralogy, (7th edition), v. II, 305–306. (2) Hintze, C. (1930) Handbuch der Mineralogie. Gruyter & Co., Berlin, 1(3.1), 2735–2739 (in German). (3) Nowotny, H. and G. Heger (1983) Structure refinement of strontium nitrate, Sr(NO₃)₂, and barium nitrate, Ba(NO₃)₂. Acta Cryst., C39, 952–956. (4) (1974) NBS Mono. 25, 11, 14.