

Crystal Data: Monoclinic. *Point Group:* $2/m$. As a massive aggregate of minute crystals.

Physical Properties: *Cleavage:* {100}, {001}, {101}. Hardness = "Soft".
D(meas.) = 2.168 (synthetic). D(calc.) = 2.15 Soluble in H₂O.

Optical Properties: Transparent. *Luster:* Dull. *Color:* Colorless to white, pale yellow;
colorless in transmitted light.

Optical Class: Biaxial (-). *Orientation:* $Y = b$; $X \wedge c = 30^\circ$. $\alpha = 1.380$ $\beta = 1.482$ $\gamma = 1.578$
 $2V(\text{meas.}) = 81.5^\circ$

Cell Data: *Space Group:* $P2_1/a$. $a = 15.1725(11)$ $b = 5.6283(5)$ $c = 3.7110(4)$
 $\beta = 104.631(6)^\circ$ $Z = 4$

X-ray Powder Pattern: Synthetic. (ICDD 12-292).
3.67 (100), 2.630 (90), 2.863 (85), 2.816 (80), 2.97 (75), 2.377 (35), 1.832 (30)

Chemistry: (1) Identification depends on agreement of optical and X-ray data with synthetic material.

Occurrence: As a result of the decomposition of a dead tree.

Association: n.d.

Distribution: From Chippis, Valais, Switzerland.

Name: For potassium, *kalium*, in the composition.

Type Material: Natural History Museum, Paris, France, 99.775.

References: (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 136–137. (2) Thomas, J.O., R. Tellgren, and I. Olovsson (1974) Hydrogen bond studies. LXXXIV. An X-ray diffraction study of the structures of KHCO₃ and KDCO₃ at 298, 219, and 95 K. Acta Cryst., 30, 1155–1166.