

Crystal Data: Triclinic. *Point Group:* $\bar{1}$. As incomplete prismatic crystals, elongated along [100], to 1 cm.

Physical Properties: *Cleavage:* Perfect on {001} and {010}. *Fracture:* n.d. *Tenacity:* Brittle. Hardness = 5 D(meas.) = 2.62(2) D(calc.) = 2.623

Optical Properties: Translucent. *Color:* Colorless to light gray. *Streak:* n.d. *Luster:* n.d. *Optical Class:* Biaxial (+). $\alpha = 1.542(2)$ $\beta = 1.550(2)$ $\gamma = 1.565(3)$ $2V(\text{meas.}) = 75(10)^\circ$ $2V(\text{calc.}) = 73^\circ$ *Orientation:* $Y \wedge a = 42^\circ$, $Z \wedge a \approx 90^\circ$. *Dispersion:* Medium, $r < v$.

Cell Data: *Space Group:* $P\bar{1}$. $a = 7.021(2)$ $b = 8.250(3)$ $c = 10.145(2)$ $\alpha = 102.23(2)^\circ$ $\beta = 100.34(2)^\circ$ $\gamma = 115.09(3)^\circ$ $Z = 2$

X-ray Powder Pattern: Bellerberg volcano, Eastern Eifel region, Rheinland-Pfalz, Germany. 3.060 (100), 3.173 (95), 2.851 (83), 3.431 (70), 3.300 (67), 2.664 (62), 2.493 (52)

Chemistry:	(1)
SiO ₂	61.46
FeO	0.59
CaO	15.04
K ₂ O	12.01
Na ₂ O	6.69
H ₂ O	4.9
Total	100.69

(1) Bellerberg volcano, Eastern Eifel region, Rheinland-Pfalz, Germany; average of 18 electron microprobe analyses, supplemented by FTIR spectroscopy, H₂O by the Alimarin method; corresponding to K_{0.99}Na_{0.84}Ca_{1.04}Fe_{0.03}Si_{3.98}H_{2.11}O₁₁.

Occurrence: The product of contact metamorphism (metasomatism) of a xenolith of a calcic carbonate rock hosted in alkaline basalt.

Association: Wollastonite, gehlenite, brownmillerite, larnite, quartz, aragonite, calcite, jennite, tobermorite, ettringite.

Distribution: From the southern lava flow, Bellerberg volcano, between Mayen and Kottenheim, Laacher See area, Eastern Eifel region, Rheinland-Pfalz, Germany.

Name: Named for its chemical composition.

Type Material: A.E. Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia (94143).

References: (1) Chukanov, N.V., S.M. Aksenov, R.K. Rastsvetaeva, G. Blass, D.A. Varlamov, I.V. Pekov, D.I. Belakovskiy and V.V. Gurzhiy (2015) Calcinaksite, KNaCa(Si₄O₁₀)H₂O, a new mineral from the Eifel volcanic area, Germany. *Mineralogy and Petrology*, 109, 397-404. (2) (2016) *Amer. Mineral.*, 101, 2125-2126 (abs. ref. 1).