

Suolunite**Ca₂Si₂O₅(OH)₂•H₂O**

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Crystal Data: Orthorhombic. *Point Group:* *mm2*. As coarse-bladed crystals, to 3 mm, in stellate aggregates; fine-granular massive.

Physical Properties: Hardness = 3.5 D(meas.) = 2.63–2.68 D(calc.) = 2.673 Distinctly piezoelectric.

Optical Properties: Transparent to translucent. *Color:* White to cream. *Luster:* Vitreous to resinous.

Optical Class: Biaxial (-). *Orientation:* X = a; Y = c; Z = b. $\alpha = 1.610$ – 1.612 $\beta = 1.620$ $\gamma = 1.623$ $2V(\text{meas.}) = 30^\circ$ – 35°

Cell Data: *Space Group:* *Fdd2*. a = 11.02–11.15 b = 19.67–19.82 c = 6.00–6.08 Z = 16

X-ray Powder Pattern: Al Khawd, Oman.

4.133 (100), 2.687 (85), 3.173 (81), 2.849 (62), 2.647 (51), 2.558 (37), 2.331 (26)

Chemistry:

	(1)	(2)	(3)
SiO ₂	43.38	43.35	44.78
CaO	42.95	42.22	41.79
SrO	trace		
Na ₂ O	trace		
K ₂ O	trace		
H ₂ O ⁺	13.17	14.05	13.43
Total	99.50	99.62	100.00

(1) Suolun, China. (2) Kulaski, Bosnia-Herzegovina. (3) Ca₂Si₂O₅(OH)₂•H₂O.

Occurrence: In veins cutting harzburgites in an ultramafic intrusive (Suolun, China); as a precipitate from an alkaline spring in a fault zone in basalts overlying an ultramafic intrusive (Al Khawd, Oman).

Association: Tobermorite.

Distribution: From Suolun, Inner Mongolia, China. At Kulaski, near Dobojo, Bosnia-Herzegovina. From Al Khawd, near Masqat, Oman.

Name: For the original locality, Suolun, China.

Type Material: n.d.

References: (1) Yung-Hwei Huang (1965) Suolunite, a new mineral. *Geol. Review*, 23(1), 7 (in Chinese). (2) (1968) *Amer. Mineral.*, 53, 349 (abs. ref. 1). (3) Jo-Ku Ts'eng, Chi-Yueh Hsieh, and Chih-Chung P'eng (1966) The crystal structure of suolunite. *Kexue Tongbao*, 17(1), 45–48 (in English). (4) (1967) *Amer. Mineral.*, 52, 560–561 (abs. ref. 3). (5) Stojanovic, D., D. Dordevic, and B. Derkovic (1974) Suolunite and tobermorite in the diabase rocks of Kulaski, near Dobojo, Bosnia, Yugoslavia. *Glas. Prirod. Muz. Beogradu*, Ser. A, 5–15 (in Serbian). (6) (1975) *Chem. Abs.*, 83, 13427 (abs. ref. 5). (7) Stanger, G. and C. Neal (1984) A new occurrence of suolunite, from Oman. *Mineral. Mag.*, 48, 143–146.