

SiO ₂	<i>hP</i> 18	(180) <i>P</i> 6 ₂ 22 – kg
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SiO₂ quartz β [2], quartz high

Structural features: SiO₄ tetrahedra (split sites) share vertices to form a 3D-framework with twisted chains and narrow channels of hexagonal cross-section parallel to [001].

Kihara K. (1990) [1]

O₂Si

$a = 0.49973$, $c = 0.54572$ nm, $c/a = 1.092$, $V = 0.1180$ nm³, $Z = 3$

site	Wyck.	sym.	<i>x</i>	<i>y</i>	<i>z</i>	occ.	atomic environment
O1	12 <i>k</i>	1	0.4169	0.1784	0.19313	0.5	
Si2	6 <i>g</i>	.2.	0.4965	0	0	0.5	

Experimental: single crystal, diffractometer, X-rays, R = 0.021, T = 859 K

Remarks: Phase stable at T > 846 K. Natural specimen of unknown origin.

References: [1] Kihara K. (1990), Eur. J. Mineral. 2, 63-77. [2] Wright A.F., Lehmann M.S. (1931), J. Solid State Chem. 36, 371-380.