

1829
MW

C₄H₁₀Si

Silacyclopentane

C₂

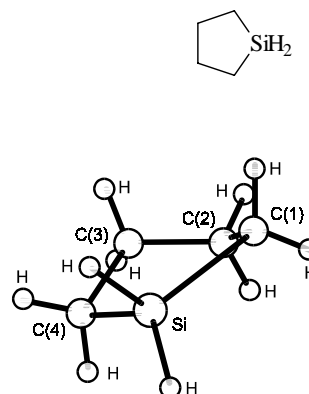
r_0, r_s	Å	θ_0, θ_s	deg
Si–H	1.478(4) ^{a)}	H–Si–H	108.76(26) ^{a)}
Si–C	1.87 ^{c)}	H–C–Si	109.5 ^{c)}
C–C	1.54 ^{c)}	H–C–C	109.5 ^{c)}
C–H	1.09 ^{c)}	C–Si–C	96.7(10) ^{b)}
		Si–C–C	105.1(10) ^{b)}
		C–C–C	113.7(10) ^{b)}
		φ ^{b)}	21(2) ^{b)}

^{a)} r_s .

^{b)} r_0 . Uncertainties for r_0 parameters were not estimated in the original paper.

^{c)} Assumed.

^{d)} Dihedral angle between the C(1)SiC(4) and C(2)SiC(3) planes.



Durig, J.R., Lafferty, W.J., Kalasinsky, V.F.: J. Phys. Chem. **80** (1976) 1199.

ED, MW

r_g	Å ^{a)}	θ_α	deg ^{a)}
Si–H	1.497(8)	H–Si–H	112.3(29)
Si–C	1.892(2)	H–C–Si, H–C–C (average)	110.1(8)
C–C (average)	1.550(2)	C–Si–C	96.3(3)
C(1)–C(2)	1.535(5)	Si–C–C	103.6(3)
C(2)–C(3)	1.580(5)	C–C–C	108.4(7)
C–H (average)	1.112(6)	C–Si–H	113.2(3)
		τ (C(1)–C(2)–C(3)–C(4))	49.7(14)
		τ (C–Si–C–C)	13.3(4)
		τ (Si–C(1)–C(2)–C(3))	36.1(10)
		φ ^{b)}	25.7(8)

The measurements were made at room temperature.

^{a)} Three times the estimated standard errors.

^{b)} Angle between the C(2)–C(3) bond and the C(4)SiC(1) plane.

Shen, Q., Hilderbrandt, R.L., Mastryukov, V.S.: J. Mol. Struct. **54** (1979) 121.

See also: Mastryukov, V.S., Golubinskii, A.V., Atavin, E.G., Vilkov, L.V., Cyvin, B.N., Cyvin, S.J.: Zh. Strukt. Khim. **20** (1979) 726; Russ. J. Struct. Chem. (Engl. Transl.) **20** (1979) 615.