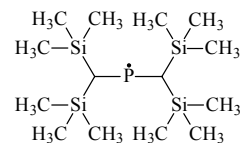


926 **C₁₄H₃₈PSi₄**
ED, *ab initio* and DFT
calculations

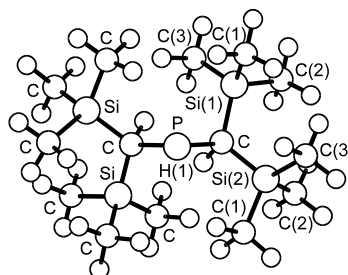
Bis[bis(trimethylsilyl)methyl]phosphino

C₂

r_a	Å ^{a)}	θ_a	deg ^{a)}
P–C	1.856(11)	C–P–C	104.0(10)
C–Si(1)	1.905(2)	P–C–Si(1)	109.1(4)
C–Si(2)	1.902(2)	P–C–Si(2)	109.8(4)
Si(1)–C(1)	1.878(2)	P–C–H	108.1(13)
Si(1)–C(2)	1.876(2)	Si–C–Si	117.5(3)
Si(1)–C(3)	1.878(2)	Si(1)–C–H(1)	106.0(6)
Si(2)–C(1)	1.880(2)	Si(2)–C–H(1)	106.0(6)
Si(2)–C(2)	1.879(2)	C–Si(1)–C(3)	109.9(3)
Si(2)–C(3)	1.875(2)	C–Si(1)–C(1)	112.1(3)
		C–Si(1)–C(2)	112.7(3)
		C(3)–Si(1)–C(1)	106.4(3)
		C(3)–Si(1)–C(2)	108.5(3)
		C(1)–Si(1)–C(2)	106.8(3)
		C–Si(2)–C(1)	110.3(3)
		C–Si(2)–C(2)	112.3(3)
		C–Si(2)–C(3)	112.8(3)
		C(1)–Si(2)–C(2)	105.1(3)
		C(1)–Si(2)–C(3)	107.8(3)
		C(2)–Si(2)–C(3)	108.2(3)
		τ^b	–26.4(8)



The radical exists as a *syn-syn* conformer. Local C_{3v} symmetry was assumed for the methyl groups. Differences between similar parameters were restrained to the values from quantum chemical calculations. The nozzle temperature was 420 K.



^{a)} Estimated standard errors.

^{b)} Torsional angle H–C–P–C from the *syn* position.

Hinchley, S.L., Morrison, C.A., Rankin, D.W.H., Macdonald, C.L.B., Wiacek, R.J., Voigt, A., Cowley, A.H., Lappert, M.F., Gundersen, G., Clyburne, J.A.C., Power, P.P.: *J. Am. Chem. Soc.* **123** (2001) 9045.

See also: Hinchley, S.L., Morrison, C.A., Rankin, D.W.H., Macdonald, C.L.B., Wiacek, R.J., Cowley, A.H., Lappert, M.F., Gundersen, G., Clyburne, J.A.C., Power, P.P.: *Chem. Commun.* (2000) 2045.