

ORGANOMETALLICS

Organometallics, 1998, 17(22), 4904-4909, DOI:[10.1021/om980280f](https://doi.org/10.1021/om980280f)

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Table 5. Torsion Angles(°) (continued)

atom	atom	atom	atom	angle	atom	atom	atom	atom	angle
Si(19')	Si(19)	Si(18)	Si(20)	21.1(5)	Si(19')	Si(19)	Si(18)	Si(21)	135.6(4)
Si(19')	Si(19)	Si(18)	Si(21')	146.2(5)	Si(19')	Si(19)	C(35)	C(41')	-87(29)
Si(19')	C(35')	C(38)	Si(20)	13(2)	Si(19')	C(36)	Si(19)	C(35)	-179(1)
Si(19')	C(36)	Si(19)	C(37)	-60.6(6)	Si(19')	C(37)	Si(19)	C(35)	178.2(9)
Si(19')	C(37)	Si(19)	C(36)	54.6(6)	Si(19)	Si(18)	Si(17)	C(33)	-39.8(5)
Si(19)	Si(18)	Si(17)	C(34)	-155.5(5)	Si(19)	Si(18)	Si(19')	C(35')	-165(1)
Si(19)	Si(18)	Si(19')	C(36)	63.8(7)	Si(19)	Si(18)	Si(19')	C(37)	-48.4(6)
Si(19)	Si(18)	Si(20')	Si(20)	-54.9(6)	Si(19)	Si(18)	Si(20')	C(38')	124.7(9)
Si(19)	Si(18)	Si(20')	C(39)	0.3(7)	Si(19)	Si(18)	Si(20')	C(40)	-111.8(6)
Si(19)	Si(18)	Si(20)	Si(20')	143.0(4)	Si(19)	Si(18)	Si(20)	C(38)	-40.7(8)
Si(19)	Si(18)	Si(20)	C(39)	83.0(6)	Si(19)	Si(18)	Si(20)	C(40)	-165.5(5)
Si(19)	Si(18)	Si(21)	Si(21')	18.1(5)	Si(19)	Si(18)	Si(21)	C(41)	-157.8(9)
Si(19)	Si(18)	Si(21)	C(42)	78.2(6)	Si(19)	Si(18)	Si(21)	C(43)	-37.6(6)
Si(19)	Si(18)	Si(21')	Si(21)	-162.0(5)	Si(19)	Si(18)	Si(21')	C(41')	22.4(8)
Si(19)	Si(18)	Si(21')	C(42)	143.7(6)	Si(19)	Si(18)	Si(21')	C(43)	-100.4(6)
Si(19)	Si(19')	Si(18)	Si(20')	-143.8(4)	Si(19)	Si(19')	Si(18)	Si(20)	-159.0(5)
Si(19)	Si(19')	Si(18)	Si(21)	-61.7(5)	Si(19)	Si(19')	Si(18)	Si(21')	-33.7(5)
Si(19)	Si(19')	C(35')	C(38)	-146(2)	Si(19)	C(35)	C(41')	Si(21')	-21(2)
Si(19)	C(36)	Si(19')	C(35')	167(1)	Si(19)	C(36)	Si(19')	C(37)	52.5(6)
Si(19)	C(37)	Si(19')	C(35')	176.9(9)	Si(19)	C(37)	Si(19')	C(36)	-60.7(7)
Si(20')	Si(18)	Si(17)	C(33)	152.1(5)	Si(20')	Si(18)	Si(17)	C(34)	36.4(5)
Si(20')	Si(18)	Si(19')	C(35')	50.3(9)	Si(20')	Si(18)	Si(19')	C(36)	-79.9(7)
Si(20')	Si(18)	Si(19')	C(37)	167.8(5)	Si(20')	Si(18)	Si(19)	C(35)	-125.1(9)
Si(20')	Si(18)	Si(19)	C(36)	-0.8(7)	Si(20')	Si(18)	Si(19)	C(37)	111.6(7)

Table 5. Torsion Angles(°) (continued)

atom	atom	atom	atom	angle	atom	atom	atom	atom	angle
Si(20')	Si(18)	Si(20)	C(38)	176.3(9)	Si(20')	Si(18)	Si(20)	C(39)	-60.1(6)
Si(20')	Si(18)	Si(20)	C(40)	51.5(5)	Si(20')	Si(18)	Si(21)	Si(21')	151.5(5)
Si(20')	Si(18)	Si(21)	C(41)	-24.4(9)	Si(20')	Si(18)	Si(21)	C(42)	-148.4(6)
Si(20')	Si(18)	Si(21)	C(43)	95.8(5)	Si(20')	Si(18)	Si(21')	Si(21)	-27.8(5)
Si(20')	Si(18)	Si(21')	C(41')	156.6(8)	Si(20')	Si(18)	Si(21')	C(42)	-82.1(5)
Si(20')	Si(18)	Si(21')	C(43)	33.8(6)	Si(20')	Si(20)	Si(18)	Si(21)	28.1(5)
Si(20')	Si(20)	Si(18)	Si(21')	59.6(5)	Si(20')	Si(20)	C(38)	C(35')	149(8)
Si(20')	C(38')	C(41)	Si(21)	13(4)	Si(20')	C(39)	Si(20)	C(38)	-174.9(9)
Si(20')	C(39)	Si(20)	C(40)	-53.0(5)	Si(20')	C(40)	Si(20)	C(38)	178.9(9)
Si(20')	C(40)	Si(20)	C(39)	57.7(6)	Si(20)	Si(18)	Si(17)	C(33)	-166.1(5)
Si(20)	Si(18)	Si(17)	C(34)	78.1(5)	Si(20)	Si(18)	Si(19')	C(35')	35.1(9)
Si(20)	Si(18)	Si(19')	C(36)	-95.2(7)	Si(20)	Si(18)	Si(19')	C(37)	152.5(6)
Si(20)	Si(18)	Si(19)	C(35)	-157.5(8)	Si(20)	Si(18)	Si(19)	C(36)	-33.2(6)
Si(20)	Si(18)	Si(19)	C(37)	79.2(7)	Si(20)	Si(18)	Si(20')	C(38')	179(1)
Si(20)	Si(18)	Si(20')	C(39)	55.2(6)	Si(20)	Si(18)	Si(20')	C(40)	-56.9(6)
Si(20)	Si(18)	Si(21)	Si(21')	133.6(5)	Si(20)	Si(18)	Si(21)	C(41)	-42.3(10)
Si(20)	Si(18)	Si(21)	C(42)	-166.3(5)	Si(20)	Si(18)	Si(21)	C(43)	77.9(6)
Si(20)	Si(18)	Si(21')	Si(21)	-61.3(6)	Si(20)	Si(18)	Si(21')	C(41')	123.2(8)
Si(20)	Si(18)	Si(21')	C(42)	-115.6(5)	Si(20)	Si(18)	Si(21')	C(43)	0.3(7)
Si(20)	Si(20')	Si(18)	Si(21)	-151.7(5)	Si(20)	Si(20')	Si(18)	Si(21')	-135.4(4)
Si(20)	Si(20')	C(38')	C(41)	-29(17)	Si(20)	C(39)	Si(20')	C(38')	-176(1)
Si(20)	C(39)	Si(20')	C(40)	58.9(6)	Si(20)	C(40)	Si(20')	C(38')	176(1)
Si(20)	C(40)	Si(20')	C(39)	-56.0(6)	Si(21)	Si(18)	Si(17)	C(33)	75.8(5)
Si(21)	Si(18)	Si(17)	C(34)	-39.9(5)	Si(21)	Si(18)	Si(19')	C(35')	132.4(9)

Table 5. Torsion Angles(°) (continued)

atom	atom	atom	atom	angle	atom	atom	atom	atom	angle
Si(21)	Si(18)	Si(19')	C(36)	2.1(8)	Si(21)	Si(18)	Si(19')	C(37)	-110.1(6)
Si(21)	Si(18)	Si(19)	C(35)	-43.0(9)	Si(21)	Si(18)	Si(19)	C(36)	81.3(6)
Si(21)	Si(18)	Si(19)	C(37)	-166.3(6)	Si(21)	Si(18)	Si(20')	C(38')	27.9(9)
Si(21)	Si(18)	Si(20')	C(39)	-96.5(5)	Si(21)	Si(18)	Si(20')	C(40)	151.4(6)
Si(21)	Si(18)	Si(20)	C(38)	-155.6(7)	Si(21)	Si(18)	Si(20)	C(39)	-32.0(6)
Si(21)	Si(18)	Si(20)	C(40)	79.6(5)	Si(21)	Si(18)	Si(21')	C(41')	-175(1)
Si(21)	Si(18)	Si(21')	C(42)	-54.3(6)	Si(21)	Si(18)	Si(21')	C(43)	61.7(6)
Si(21)	Si(21')	C(41')	C(35)	-109(12)	Si(21)	C(42)	Si(21')	C(41')	178(1)
Si(21)	C(42)	Si(21')	C(43)	-61.6(6)	Si(21)	C(43)	Si(21')	C(41')	176(1)
Si(21)	C(43)	Si(21')	C(42)	57.3(6)	Si(21')	Si(18)	Si(17)	C(33)	39.7(5)
Si(21')	Si(18)	Si(17)	C(34)	-76.1(5)	Si(21')	Si(18)	Si(19')	C(35')	160.4(9)
Si(21')	Si(18)	Si(19')	C(36)	30.1(7)	Si(21')	Si(18)	Si(19')	C(37)	-82.2(6)
Si(21')	Si(18)	Si(19)	C(35)	-32.4(8)	Si(21')	Si(18)	Si(19)	C(36)	91.9(6)
Si(21')	Si(18)	Si(19)	C(37)	-155.7(7)	Si(21')	Si(18)	Si(20')	C(38')	44.2(9)
Si(21')	Si(18)	Si(20')	C(39)	-80.2(6)	Si(21')	Si(18)	Si(20')	C(40)	167.7(5)
Si(21')	Si(18)	Si(20)	C(38)	-124.1(7)	Si(21')	Si(18)	Si(20)	C(39)	-0.5(7)
Si(21')	Si(18)	Si(20)	C(40)	111.1(6)	Si(21')	Si(18)	Si(21)	C(41)	-175(1)
Si(21')	Si(18)	Si(21)	C(42)	60.1(6)	Si(21')	Si(18)	Si(21)	C(43)	-55.7(6)
Si(21')	Si(21)	C(41)	C(38')	-127(8)	Si(21')	C(42)	Si(21)	C(41)	173(1)
Si(21')	C(42)	Si(21)	C(43)	56.7(6)	Si(21')	C(43)	Si(21)	C(41)	-177(1)
Si(21')	C(43)	Si(21)	C(42)	-60.7(6)	Si(22)	Si(1)	Si(2)	C(2)	47.3(4)
Si(22)	Si(1)	Si(2)	C(3)	-61.9(5)	Si(22)	Si(1)	Si(12)	C(23)	-173.9(4)
Si(22)	Si(1)	Si(12)	C(24)	73.9(4)	Si(22)	Si(23)	Si(24)	C(46)	29.5(5)
Si(22)	Si(23)	Si(24)	C(47)	147.5(5)	Si(22)	Si(23)	Si(24)	C(48)	-95.3(5)

Table 5. Torsion Angles(°) (continued)

atom	atom	atom	atom	angle	atom	atom	atom	atom	angle
Si(22)	Si(23)	Si(25)	C(49)	39.8(6)	Si(22)	Si(23)	Si(25)	C(50)	-78.7(5)
Si(22)	Si(23)	Si(25)	C(51)	161.0(5)	Si(22)	Si(23)	Si(26)	Si(27)	-59.1(3)
Si(22)	Si(23)	Si(26)	C(52)	177.1(4)	Si(22)	Si(23)	Si(26)	C(53)	61.4(4)
Si(23)	Si(22)	Si(1)	C(1)	55.8(5)	Si(23)	Si(26)	Si(27)	Si(28)	-156.0(2)
Si(23)	Si(26)	Si(27)	C(54)	-31.5(5)	Si(23)	Si(26)	Si(27)	C(55)	85.2(5)
Si(24)	Si(23)	Si(22)	C(44)	-57.0(4)	Si(24)	Si(23)	Si(22)	C(45)	-174.4(4)
Si(24)	Si(23)	Si(25)	C(49)	162.7(5)	Si(24)	Si(23)	Si(25)	C(50)	44.1(5)
Si(24)	Si(23)	Si(25)	C(51)	-76.2(5)	Si(24)	Si(23)	Si(26)	Si(27)	168.8(2)
Si(24)	Si(23)	Si(26)	C(52)	44.9(4)	Si(24)	Si(23)	Si(26)	C(53)	-70.8(4)
Si(25)	Si(23)	Si(22)	C(44)	53.5(4)	Si(25)	Si(23)	Si(22)	C(45)	-63.9(4)
Si(25)	Si(23)	Si(24)	C(46)	-81.3(5)	Si(25)	Si(23)	Si(24)	C(47)	36.8(5)
Si(25)	Si(23)	Si(24)	C(48)	154.0(4)	Si(25)	Si(23)	Si(26)	Si(27)	59.6(3)
Si(25)	Si(23)	Si(26)	C(52)	-64.3(4)	Si(25)	Si(23)	Si(26)	C(53)	-179.9(4)
Si(26)	Si(23)	Si(22)	C(44)	178.2(4)	Si(26)	Si(23)	Si(22)	C(45)	60.8(4)
Si(26)	Si(23)	Si(24)	C(46)	160.7(5)	Si(26)	Si(23)	Si(24)	C(47)	-81.3(5)
Si(26)	Si(23)	Si(24)	C(48)	35.9(5)	Si(26)	Si(23)	Si(25)	C(49)	-87.1(6)
Si(26)	Si(23)	Si(25)	C(50)	154.4(4)	Si(26)	Si(23)	Si(25)	C(51)	34.1(6)
Si(26)	Si(27)	Si(28)	Si(29)	-170.0(2)	Si(26)	Si(27)	Si(28)	Si(30)	58.7(5)
Si(26)	Si(27)	Si(28)	Si(30)	80.3(3)	Si(26)	Si(27)	Si(28)	Si(31)	-45.2(4)
Si(26)	Si(27)	Si(28)	Si(31)	-63.5(4)	Si(27)	Si(28)	Si(29)	C(56)	80.4(6)
Si(27)	Si(28)	Si(29)	C(56')	34(1)	Si(27)	Si(28)	Si(29)	C(57)	-32.8(8)
Si(27)	Si(28)	Si(29)	C(57')	-72(1)	Si(27)	Si(28)	Si(29)	C(58)	-165.4(7)
Si(27)	Si(28)	Si(29)	C(58')	172(1)	Si(27)	Si(28)	Si(30)	Si(30)	87(1)
Si(27)	Si(28)	Si(30)	C(59')	38(1)	Si(27)	Si(28)	Si(30)	C(60)	10(1)

Table 5. Torsion Angles(°) (continued)

atom	atom	atom	atom	angle	atom	atom	atom	atom	angle
Si(27)	Si(28)	Si(30')	C(60')	-85(1)	Si(27)	Si(28)	Si(30')	C(61)	157.4(8)
Si(27)	Si(28)	Si(30)	Si(30')	-100(1)	Si(27)	Si(28)	Si(30)	C(59)	73.7(8)
Si(27)	Si(28)	Si(30)	C(59')	-3(1)	Si(27)	Si(28)	Si(30)	C(60)	-39(1)
Si(27)	Si(28)	Si(30)	C(61)	-174.8(6)	Si(27)	Si(28)	Si(31')	Si(31)	-70(1)
Si(27)	Si(28)	Si(31')	C(62')	-45.4(9)	Si(27)	Si(28)	Si(31')	C(63)	4(1)
Si(27)	Si(28)	Si(31')	C(63')	73.7(8)	Si(27)	Si(28)	Si(31')	C(64)	-163.1(5)
Si(27)	Si(28)	Si(31)	Si(31')	116(1)	Si(27)	Si(28)	Si(31)	C(62)	-69(1)
Si(27)	Si(28)	Si(31)	C(62')	-13(1)	Si(27)	Si(28)	Si(31)	C(63)	48(1)
Si(27)	Si(28)	Si(31)	C(64)	175.1(5)	Si(28)	Si(27)	Si(26)	C(52)	-34.0(5)
Si(28)	Si(27)	Si(26)	C(53)	83.1(5)	Si(28)	Si(29)	C(56)	C(56')	-116(1)
Si(28)	Si(29)	C(56')	C(56)	82(1)	Si(28)	Si(29)	C(56')	C(57)	-102(1)
Si(28)	Si(29)	C(57)	C(56')	111(1)	Si(28)	Si(29)	C(57)	C(57')	-82(1)
Si(28)	Si(29)	C(57')	C(57)	111(1)	Si(28)	Si(29)	C(58)	C(58')	-89(4)
Si(28)	Si(29)	C(58')	C(58)	98(4)	Si(28)	Si(30')	Si(30)	C(59)	-42(13)
Si(28)	Si(30')	Si(30)	C(59')	-111(1)	Si(28)	Si(30')	Si(30)	C(60)	-124.5(10)
Si(28)	Si(30')	Si(30)	C(61)	115.0(7)	Si(28)	Si(30')	C(59')	Si(30)	78(1)
Si(28)	Si(30')	C(59')	C(60)	-129(2)	Si(28)	Si(30')	C(60)	Si(30)	84(1)
Si(28)	Si(30')	C(60)	C(59')	63(2)	Si(28)	Si(30')	C(61)	Si(30)	-83(1)
Si(28)	Si(30)	Si(30')	C(59')	111(1)	Si(28)	Si(30)	Si(30')	C(60)	124.5(10)
Si(28)	Si(30)	Si(30')	C(60')	165(4)	Si(28)	Si(30)	Si(30')	C(61)	-115.0(7)
Si(28)	Si(30)	C(59')	Si(30')	-72(1)	Si(28)	Si(30)	C(59')	C(60)	-96(2)
Si(28)	Si(30)	C(60)	Si(30')	-56(1)	Si(28)	Si(30)	C(60)	C(59')	99(2)
Si(28)	Si(30)	C(61)	Si(30')	63(1)	Si(28)	Si(31')	Si(31)	C(62)	-129(15)
Si(28)	Si(31')	Si(31)	C(62')	128(2)	Si(28)	Si(31')	Si(31)	C(63)	120(1)

Table 5. Torsion Angles(°) (continued)

atom	atom	atom	atom	angle	atom	atom	atom	atom	angle
Si(28)	Si(31')	Si(31)	C(64)	-113.9(6)	Si(28)	Si(31')	C(62')	Si(31)	-55(2)
Si(28)	Si(31')	C(62')	C(62)	-65(1)	Si(28)	Si(31')	C(62')	C(63)	113(1)
Si(28)	Si(31')	C(63)	Si(31)	-82(1)	Si(28)	Si(31')	C(63)	C(62')	-88(1)
Si(28)	Si(31')	C(64)	Si(31)	90(1)	Si(28)	Si(31)	Si(31')	C(62')	-128(2)
Si(28)	Si(31)	Si(31')	C(63)	-120(1)	Si(28)	Si(31)	Si(31')	C(63')	-124(2)
Si(28)	Si(31)	Si(31')	C(64)	113.9(6)	Si(28)	Si(31)	C(62)	C(62')	124(1)
Si(28)	Si(31)	C(62')	Si(31')	102(3)	Si(28)	Si(31)	C(62')	C(62)	-87(1)
Si(28)	Si(31)	C(62')	C(63)	92(1)	Si(28)	Si(31)	C(63)	Si(31')	64(1)
Si(28)	Si(31)	C(63)	C(62')	-123(1)	Si(28)	Si(31)	C(64)	Si(31')	-63(1)
Si(29)	Si(28)	Si(27)	C(54)	64.3(5)	Si(29)	Si(28)	Si(27)	C(55)	-51.0(5)
Si(29)	Si(28)	Si(30')	Si(30)	-39(1)	Si(29)	Si(28)	Si(30')	C(59')	-88(1)
Si(29)	Si(28)	Si(30')	C(60)	-116(1)	Si(29)	Si(28)	Si(30')	C(60')	148(1)
Si(29)	Si(28)	Si(30')	C(61)	30(1)	Si(29)	Si(28)	Si(30)	Si(30')	144(1)
Si(29)	Si(28)	Si(30)	C(59)	-40.4(8)	Si(29)	Si(28)	Si(30)	C(59')	-117(1)
Si(29)	Si(28)	Si(30)	C(60)	-153.8(10)	Si(29)	Si(28)	Si(30)	C(61)	71.1(7)
Si(29)	Si(28)	Si(31')	Si(31)	53(1)	Si(29)	Si(28)	Si(31')	C(62')	78.3(9)
Si(29)	Si(28)	Si(31')	C(63)	128(1)	Si(29)	Si(28)	Si(31')	C(63')	-162.6(8)
Si(29)	Si(28)	Si(31')	C(64)	-39.4(6)	Si(29)	Si(28)	Si(31)	Si(31')	-130(1)
Si(29)	Si(28)	Si(31)	C(62)	42(1)	Si(29)	Si(28)	Si(31)	C(62')	98(1)
Si(29)	Si(28)	Si(31)	C(63)	161(1)	Si(29)	Si(28)	Si(31)	C(64)	-72.3(6)
Si(29)	C(56)	C(56')	C(57)	-6(2)	Si(29)	C(56')	C(57)	C(57')	-20(3)
Si(29)	C(57)	C(56')	C(56)	7(3)	Si(29)	C(57')	C(57)	C(56')	17(3)
Si(30')	Si(28)	Si(27)	C(54)	-67.1(6)	Si(30')	Si(28)	Si(27)	C(55)	177.7(6)
Si(30')	Si(28)	Si(29)	C(56)	-149.9(8)	Si(30')	Si(28)	Si(29)	C(56')	163(1)

Table 5. Torsion Angles(°) (continued)

atom	atom	atom	atom	angle	atom	atom	atom	atom	angle
Si(30')	Si(28)	Si(29)	C(57)	96.9(9)	Si(30')	Si(28)	Si(29)	C(57')	57(1)
Si(30')	Si(28)	Si(29)	C(58)	-35.7(9)	Si(30')	Si(28)	Si(29)	C(58')	-57(1)
Si(30')	Si(28)	Si(30)	C(59)	174(1)	Si(30')	Si(28)	Si(30)	C(59')	97(2)
Si(30')	Si(28)	Si(30)	C(60)	61(1)	Si(30')	Si(28)	Si(30)	C(61)	-73(1)
Si(30')	Si(28)	Si(31')	Si(31)	171(1)	Si(30')	Si(28)	Si(31')	C(62')	-162.7(9)
Si(30')	Si(28)	Si(31')	C(63)	-112(1)	Si(30')	Si(28)	Si(31')	C(63')	-43.7(9)
Si(30')	Si(28)	Si(31')	C(64)	79.5(7)	Si(30')	Si(28)	Si(31)	Si(31')	-8(1)
Si(30')	Si(28)	Si(31)	C(62)	164(1)	Si(30')	Si(28)	Si(31)	C(62')	-139(1)
Si(30')	Si(28)	Si(31)	C(63)	-76(1)	Si(30')	Si(28)	Si(31)	C(64)	49.8(8)
Si(30')	Si(30)	Si(28)	Si(31')	29(1)	Si(30')	Si(30)	Si(28)	Si(31)	36(1)
Si(30')	Si(30)	C(59')	C(60)	-24(3)	Si(30')	Si(30)	C(60)	C(59')	156(3)
Si(30')	C(59')	Si(30)	C(59)	-172(1)	Si(30')	C(59')	Si(30)	C(60)	24(3)
Si(30')	C(59')	Si(30)	C(61)	96(2)	Si(30')	C(59')	C(60)	Si(30)	-10(1)
Si(30')	C(60)	Si(30)	C(59)	-172(1)	Si(30')	C(60)	Si(30)	C(59')	-156(3)
Si(30')	C(60)	Si(30)	C(61)	74(1)	Si(30')	C(60)	C(59')	Si(30)	10(1)
Si(30')	C(61)	Si(30)	C(59)	176(1)	Si(30')	C(61)	Si(30)	C(59')	-106(2)
Si(30')	C(61)	Si(30)	C(60)	-70(1)	Si(30)	Si(28)	Si(27)	C(54)	-45.5(5)
Si(30)	Si(28)	Si(27)	C(55)	-160.7(5)	Si(30)	Si(28)	Si(29)	C(56)	-162.7(6)
Si(30)	Si(28)	Si(29)	C(56')	151(1)	Si(30)	Si(28)	Si(29)	C(57)	84.1(8)
Si(30)	Si(28)	Si(29)	C(57')	44(1)	Si(30)	Si(28)	Si(29)	C(58)	-48.5(8)
Si(30)	Si(28)	Si(29)	C(58')	-70(1)	Si(30)	Si(28)	Si(30')	C(59')	-49(1)
Si(30)	Si(28)	Si(30')	C(60)	-76(1)	Si(30)	Si(28)	Si(30')	C(60')	-172(2)
Si(30)	Si(28)	Si(30')	C(61)	69(1)	Si(30)	Si(28)	Si(31')	Si(31)	162(1)
Si(30)	Si(28)	Si(31')	C(62')	-172.5(9)	Si(30)	Si(28)	Si(31')	C(63)	-122(1)

Table 5. Torsion Angles(°) (continued)

atom	atom	atom	atom	angle	atom	atom	atom	atom	angle
Si(30)	Si(28)	Si(31')	C(63')	-53.5(9)	Si(30)	Si(28)	Si(31')	C(64)	69.7(7)
Si(30)	Si(28)	Si(31)	Si(31')	-20(1)	Si(30)	Si(28)	Si(31)	C(62)	152(1)
Si(30)	Si(28)	Si(31)	C(62')	-151(1)	Si(30)	Si(28)	Si(31)	C(63)	-89(1)
Si(30)	Si(28)	Si(31)	C(64)	37.3(8)	Si(30)	Si(30')	Si(28)	Si(31')	-151(1)
Si(30)	Si(30')	Si(28)	Si(31)	-149(1)	Si(30)	Si(30')	C(59')	C(60)	152(3)
Si(30)	Si(30')	C(60)	C(59')	-21(2)	Si(30)	C(59')	Si(30')	C(60)	-152(3)
Si(30)	C(59')	Si(30')	C(60')	-155(2)	Si(30)	C(59')	Si(30')	C(61)	-45(1)
Si(30)	C(60)	Si(30')	C(59')	21(2)	Si(30)	C(60)	Si(30')	C(60')	-161(1)
Si(30)	C(60)	Si(30')	C(61)	-62(1)	Si(30)	C(61)	Si(30')	C(59')	35(1)
Si(30)	C(61)	Si(30')	C(60)	66(1)	Si(30)	C(61)	Si(30')	C(60')	151(1)
Si(31')	Si(28)	Si(27)	C(54)	-170.9(5)	Si(31')	Si(28)	Si(27)	C(55)	73.8(5)
Si(31')	Si(28)	Si(29)	C(56)	-49.0(7)	Si(31')	Si(28)	Si(29)	C(56')	-95(1)
Si(31')	Si(28)	Si(29)	C(57)	-162.2(8)	Si(31')	Si(28)	Si(29)	C(57')	158(1)
Si(31')	Si(28)	Si(29)	C(58)	65.2(8)	Si(31')	Si(28)	Si(29)	C(58')	43(1)
Si(31')	Si(28)	Si(30')	C(59')	158(1)	Si(31')	Si(28)	Si(30')	C(60)	131(1)
Si(31')	Si(28)	Si(30')	C(60')	35(1)	Si(31')	Si(28)	Si(30')	C(61)	-81.9(9)
Si(31')	Si(28)	Si(30)	C(59)	-155.6(8)	Si(31')	Si(28)	Si(30)	C(59')	127(1)
Si(31')	Si(28)	Si(30)	C(60)	90(1)	Si(31')	Si(28)	Si(30)	C(61)	-44.1(7)
Si(31')	Si(28)	Si(31)	C(62)	173(2)	Si(31')	Si(28)	Si(31)	C(62')	-130(2)
Si(31')	Si(28)	Si(31)	C(63)	-68(1)	Si(31')	Si(28)	Si(31)	C(64)	58(1)
Si(31')	Si(31)	C(62)	C(62')	-109(15)	Si(31')	Si(31)	C(62')	C(62)	170(2)
Si(31')	Si(31)	C(62')	C(63)	-9(3)	Si(31')	Si(31)	C(63)	C(62')	172(2)
Si(31')	C(62')	Si(31)	C(62)	-170(2)	Si(31')	C(62')	Si(31)	C(63)	9(3)
Si(31')	C(62')	Si(31)	C(64)	-87(2)	Si(31')	C(62')	C(62)	Si(31)	2.9(8)

Table 5. Torsion Angles(°) (continued)

atom	atom	atom	atom	angle	atom	atom	atom	atom	angle
Si(31')	C(62')	C(63)	Si(31)	-3(1)	Si(31')	C(63)	Si(31)	C(62)	-172(2)
Si(31')	C(63)	Si(31)	C(62')	-172(2)	Si(31')	C(63)	Si(31)	C(64)	-54(1)
Si(31')	C(63)	C(62')	Si(31)	3(1)	Si(31')	C(63)	C(62')	C(62)	3(8)
Si(31')	C(64)	Si(31)	C(62)	177(2)	Si(31')	C(64)	Si(31)	C(62')	125(2)
Si(31')	C(64)	Si(31)	C(63)	61(1)	Si(31)	Si(28)	Si(27)	C(54)	170.7(5)
Si(31)	Si(28)	Si(27)	C(55)	55.5(6)	Si(31)	Si(28)	Si(29)	C(56)	-34.3(7)
Si(31)	Si(28)	Si(29)	C(56')	-80(1)	Si(31)	Si(28)	Si(29)	C(57)	-147.5(8)
Si(31)	Si(28)	Si(29)	C(57')	172(1)	Si(31)	Si(28)	Si(29)	C(58)	79.8(8)
Si(31)	Si(28)	Si(29)	C(58')	58(1)	Si(31)	Si(28)	Si(30')	C(59')	161(1)
Si(31)	Si(28)	Si(30')	C(60)	134(1)	Si(31)	Si(28)	Si(30')	C(60')	38(1)
Si(31)	Si(28)	Si(30')	C(61)	-79.3(10)	Si(31)	Si(28)	Si(30)	C(59)	-148.9(8)
Si(31)	Si(28)	Si(30)	C(59')	134(1)	Si(31)	Si(28)	Si(30)	C(60)	97(1)
Si(31)	Si(28)	Si(30)	C(61)	-37.3(8)	Si(31)	Si(28)	Si(31')	C(62')	25(1)
Si(31)	Si(28)	Si(31')	C(63)	75(1)	Si(31)	Si(28)	Si(31')	C(63')	144(1)
Si(31)	Si(28)	Si(31')	C(64)	-92(1)	Si(31)	Si(31')	C(62')	C(62)	-10(2)
Si(31)	Si(31')	C(62')	C(63)	168(3)	Si(31)	Si(31')	C(63)	C(62')	-5(1)
Si(31)	C(62)	C(62')	C(63)	0(7)	Si(31)	C(62')	Si(31')	C(63)	-168(3)
Si(31)	C(62')	Si(31')	C(63')	-177(3)	Si(31)	C(62')	Si(31')	C(64)	66(2)
Si(31)	C(63)	Si(31')	C(62')	5(1)	Si(31)	C(63)	Si(31')	C(63')	176(2)
Si(31)	C(63)	Si(31')	C(64)	83(1)	Si(31)	C(63)	C(62')	C(62)	0(7)
Si(31)	C(64)	Si(31')	C(62')	-28(1)	Si(31)	C(64)	Si(31')	C(63)	-76(1)
Si(31)	C(64)	Si(31')	C(63')	-144(1)	C(1)	Si(1)	Si(2)	C(2)	-69.0(6)
C(1)	Si(1)	Si(2)	C(3)	-178.2(6)	C(1)	Si(1)	Si(12)	C(23)	-55.3(6)
C(1)	Si(1)	Si(12)	C(24)	-167.5(6)	C(1)	Si(1)	Si(22)	C(44)	-175.0(5)

Table 5. Torsion Angles(°) (continued)

atom	atom	atom	atom	angle	atom	atom	atom	atom	angle
C(1)	Si(1)	Si(22)	C(45)	-59.5(5)	C(4)	Si(4)	C(5)	C(5')	25(3)
C(4)	Si(4)	C(5')	C(5)	-154(2)	C(4)	Si(4)	C(6')	C(6)	-4(5)
C(4)	Si(4)	C(6)	C(6')	176(5)	C(4)	C(4')	Si(4)	C(5)	-26(4)
C(4)	C(4')	Si(4)	C(5')	-7(3)	C(4)	C(4')	Si(4)	C(6')	-127(3)
C(4)	C(4')	Si(4)	C(6)	-120(3)	C(4')	Si(4)	C(5)	C(5')	37(3)
C(4')	Si(4)	C(5')	C(5)	-151(2)	C(4')	Si(4)	C(6')	C(6)	18(5)
C(4')	Si(4)	C(6)	C(6')	-162(5)	C(4')	C(4)	Si(4)	C(5)	159(3)
C(4')	C(4)	Si(4)	C(5')	172(3)	C(4')	C(4)	Si(4)	C(6')	60(3)
C(4')	C(4)	Si(4)	C(6)	59(3)	C(5)	Si(4)	C(6')	C(6)	-113(5)
C(5)	Si(4)	C(6)	C(6')	67(5)	C(5)	C(5')	Si(4)	C(6')	-39(2)
C(5)	C(5')	Si(4)	C(6)	-62(3)	C(5')	Si(4)	C(6')	C(6)	-94(5)
C(5')	Si(4)	C(6)	C(6')	94(5)	C(5')	C(5)	Si(4)	C(6')	144(2)
C(5')	C(5)	Si(4)	C(6)	125(2)	C(10)	Si(6)	Si(7)	C(12)	-88.4(6)
C(10)	Si(6)	Si(7)	C(13)	154.7(6)	C(11)	Si(6)	Si(7)	C(12)	156.5(6)
C(11)	Si(6)	Si(7)	C(13)	39.6(7)	C(31)	Si(16)	Si(17)	C(33)	41.1(6)
C(31)	Si(16)	Si(17)	C(34)	158.8(6)	C(32)	Si(16)	Si(17)	C(33)	156.9(6)
C(32)	Si(16)	Si(17)	C(34)	-85.4(6)	C(35)	Si(19)	Si(19')	C(35')	-116(29)
C(35)	Si(19)	Si(19')	C(36)	12(29)	C(35)	Si(19)	Si(19')	C(37)	-104(29)
C(35)	C(41')	Si(21')	C(42)	-126(2)	C(35)	C(41')	Si(21')	C(43)	117(2)
C(35')	Si(19')	Si(19)	C(36)	-129(3)	C(35')	Si(19')	Si(19)	C(37)	-12(3)
C(35')	C(38)	Si(20)	C(39)	-106(2)	C(35')	C(38)	Si(20)	C(40)	138(2)
C(36)	Si(19')	Si(19)	C(37)	117.2(7)	C(36)	Si(19')	C(35')	C(38)	88(2)
C(36)	Si(19)	Si(19')	C(37)	-117.2(7)	C(36)	Si(19)	C(35)	C(41')	-75(2)
C(37)	Si(19')	C(35')	C(38)	-157(1)	C(37)	Si(19)	C(35)	C(41')	168(1)

Table 5. Torsion Angles(°) (continued)

atom	atom	atom	atom	angle	atom	atom	atom	atom	angle
C(38)	Si(20)	Si(20')	C(38')	-140(15)	C(38)	Si(20)	Si(20')	C(39)	106(9)
C(38)	Si(20)	Si(20')	C(40)	-11(9)	C(38')	Si(20')	Si(20)	C(39)	113(15)
C(38')	Si(20')	Si(20)	C(40)	-128(15)	C(38')	C(41)	Si(21)	C(42)	139(3)
C(38')	C(41)	Si(21)	C(43)	-106(3)	C(39)	Si(20')	Si(20)	C(40)	118.0(6)
C(39)	Si(20')	C(38')	C(41)	82(3)	C(39)	Si(20)	Si(20')	C(40)	-118.0(6)
C(40)	Si(20')	C(38')	C(41)	-156(3)	C(41)	Si(21)	Si(21')	C(41')	-111(14)
C(41)	Si(21)	Si(21')	C(42)	-94(9)	C(41)	Si(21)	Si(21')	C(43)	22(9)
C(41')	Si(21')	Si(21)	C(42)	-17(12)	C(41')	Si(21')	Si(21)	C(43)	-134(12)
C(42)	Si(21)	Si(21')	C(43)	116.9(6)	C(42)	Si(21')	Si(21)	C(43)	-116.9(6)
C(52)	Si(26)	Si(27)	C(54)	90.5(6)	C(52)	Si(26)	Si(27)	C(55)	-152.7(6)
C(53)	Si(26)	Si(27)	C(54)	-152.3(6)	C(53)	Si(26)	Si(27)	C(55)	-35.6(6)
C(56)	Si(29)	C(56')	C(57)	174(2)	C(56)	Si(29)	C(57)	C(56')	-3(1)
C(56)	Si(29)	C(57)	C(57')	162(1)	C(56)	Si(29)	C(57')	C(57)	-26(2)
C(56)	Si(29)	C(58)	C(58')	25(4)	C(56)	Si(29)	C(58')	C(58)	-155(4)
C(56)	C(56')	Si(29)	C(57)	-174(2)	C(56)	C(56')	Si(29)	C(57')	-166(1)
C(56)	C(56')	Si(29)	C(58)	-76(1)	C(56)	C(56')	Si(29)	C(58')	-55(2)
C(56)	C(56')	C(57)	C(57')	-12(5)	C(56')	Si(29)	C(57)	C(57')	166(2)
C(56')	Si(29)	C(57')	C(57)	-11(2)	C(56')	Si(29)	C(58)	C(58')	69(4)
C(56')	Si(29)	C(58')	C(58)	-120(4)	C(56')	C(56)	Si(29)	C(57)	4(1)
C(56')	C(56)	Si(29)	C(57')	20(2)	C(56')	C(56)	Si(29)	C(58)	123(1)
C(56')	C(56)	Si(29)	C(58')	131(2)	C(56')	C(57)	Si(29)	C(57')	-166(2)
C(56')	C(57)	Si(29)	C(58)	-116(1)	C(56')	C(57)	Si(29)	C(58')	-98(1)
C(57)	Si(29)	C(58)	C(58')	136(4)	C(57)	Si(29)	C(58')	C(58)	-51(4)
C(57)	C(56')	Si(29)	C(57')	8(1)	C(57)	C(56')	Si(29)	C(58)	98(1)

Table 5. Torsion Angles(°) (continued)

atom	atom	atom	atom	angle	atom	atom	atom	atom	angle
C(57)	C(56')	Si(29)	C(58')	119(1)	C(57)	C(57')	Si(29)	C(58)	-135(1)
C(57)	C(57')	Si(29)	C(58')	-129(1)	C(57')	Si(29)	C(58)	C(58')	165(4)
C(57')	Si(29)	C(58')	C(58)	-15(4)	C(57')	C(57)	Si(29)	C(58)	50(2)
C(57')	C(57)	Si(29)	C(58')	67(2)	C(59)	Si(30)	Si(30')	C(59')	68(12)
C(59)	Si(30)	Si(30')	C(60)	81(12)	C(59)	Si(30)	Si(30')	C(60')	123(11)
C(59)	Si(30)	Si(30')	C(61)	-157(12)	C(59)	Si(30)	C(59')	C(60)	163(2)
C(59)	Si(30)	C(60)	C(59')	-16(2)	C(59')	Si(30')	Si(30)	C(60)	-13(1)
C(59')	Si(30')	Si(30)	C(61)	-133(1)	C(59')	Si(30)	Si(30')	C(60)	13(1)
C(59')	Si(30)	Si(30')	C(60')	54(4)	C(59')	Si(30)	Si(30')	C(61)	133(1)
C(59')	C(60)	Si(30')	C(60')	177(2)	C(59')	C(60)	Si(30')	C(61)	-83(2)
C(59')	C(60)	Si(30)	C(61)	-128(2)	C(60)	Si(30')	Si(30)	C(61)	-120.5(9)
C(60)	Si(30)	Si(30')	C(60')	41(4)	C(60)	Si(30)	Si(30')	C(61)	120.5(9)
C(60)	C(59')	Si(30')	C(60')	-2(2)	C(60)	C(59')	Si(30')	C(61)	107(2)
C(60)	C(59')	Si(30)	C(61)	72(3)	C(60')	Si(30')	Si(30)	C(61)	-79(4)
C(62)	Si(31)	Si(31')	C(62')	102(16)	C(62)	Si(31)	Si(31')	C(63)	110(15)
C(62)	Si(31)	Si(31')	C(63')	106(14)	C(62)	Si(31)	Si(31')	C(64)	-15(15)
C(62)	Si(31)	C(62')	C(63)	179(2)	C(62)	Si(31)	C(63)	C(62')	0(1)
C(62)	C(62')	Si(31')	C(63)	-178(2)	C(62)	C(62')	Si(31')	C(63')	172(1)
C(62)	C(62')	Si(31')	C(64)	56(1)	C(62)	C(62')	Si(31)	C(63)	-179(2)
C(62)	C(62')	Si(31)	C(64)	82(2)	C(62')	Si(31')	Si(31)	C(63)	-8(2)
C(62')	Si(31')	Si(31)	C(64)	117(2)	C(62')	Si(31)	Si(31')	C(63)	8(2)
C(62')	Si(31)	Si(31')	C(63')	3(4)	C(62')	Si(31)	Si(31')	C(64)	-117(2)
C(62')	C(62)	Si(31)	C(63)	0(2)	C(62')	C(62)	Si(31)	C(64)	-123(1)
C(62')	C(63)	Si(31')	C(63')	170(2)	C(62')	C(63)	Si(31')	C(64)	77(1)

Table 5. Torsion Angles(°) (continued).

atom	atom	atom	atom	angle	atom	atom	atom	atom	angle
C(62')	C(63)	Si(31)	C(64)	117(1)	C(63)	Si(31')	Si(31)	C(64)	125(1)
C(63)	Si(31)	Si(31')	C(63')	-4(2)	C(63)	Si(31)	Si(31')	C(64)	-125(1)
C(63)	C(62')	Si(31')	C(63')	-8(1)	C(63)	C(62')	Si(31')	C(64)	-124(1)
C(63)	C(62')	Si(31)	C(64)	-97(1)	C(63')	Si(31')	Si(31)	C(64)	121(2)
C(65)	C(66)	C(67)	C(68)	-1(3)	C(65)	C(70)	C(69)	C(68)	0(3)
C(66)	C(65)	C(70)	C(69)	0(3)	C(66)	C(67)	C(68)	C(69)	1(3)
C(67)	C(66)	C(65)	C(70)	0(2)	C(67)	C(68)	C(69)	C(70)	0(4)

**Crystallographic Parameters for 2,5-(Trimethylsilyl)-3,4-[methylbis(trimethylsilyl)-
silyl]-1,1,1,2,3,4,5,6,6,6-decamethylhexasilane (4)**

Table 1. Atomic coordinates and B_{iso}/B_{eq}

atom	x	y	z	B_{eq}
Si(1)	0.0616(1)	-0.00438(9)	0.90565(8)	1.46(2)
Si(2)	0.0011(1)	0.16315(9)	0.75856(8)	1.69(2)
Si(3)	0.0303(1)	-0.16398(9)	0.86103(8)	1.72(2)
Si(4)	0.2176(1)	0.22129(9)	0.66558(9)	2.23(3)
Si(5)	-0.2116(1)	0.33862(9)	0.76695(9)	2.07(2)
Si(6)	0.2324(1)	-0.26248(10)	0.73086(9)	2.44(3)
Si(7)	-0.2033(1)	-0.13056(10)	0.81864(9)	2.27(3)
C(1)	0.2689(4)	-0.0406(3)	0.9014(3)	2.32(9)
C(2)	-0.0163(4)	0.1017(3)	0.6461(3)	2.45(9)
C(3)	0.0389(4)	-0.2842(3)	0.9911(3)	2.83(10)
C(4)	0.3718(4)	0.0974(4)	0.6034(3)	3.4(1)
C(5)	0.2952(4)	0.2726(3)	0.7506(3)	3.1(1)
C(6)	0.1701(5)	0.3440(4)	0.5443(3)	3.9(1)
C(7)	-0.1609(4)	0.4686(3)	0.7676(3)	2.78(10)
C(8)	-0.2781(4)	0.3708(3)	0.6366(3)	3.2(1)
C(9)	-0.3799(4)	0.3304(3)	0.8823(3)	3.03(10)
C(10)	0.2555(4)	-0.1858(4)	0.5828(3)	3.5(1)
C(11)	0.4180(5)	-0.3027(4)	0.7683(4)	4.9(1)
C(12)	0.2014(6)	-0.4035(4)	0.7394(4)	5.0(1)
C(13)	-0.3476(4)	0.0152(4)	0.8404(3)	3.4(1)
C(14)	-0.1814(5)	-0.1435(4)	0.6733(3)	3.4(1)
C(15)	-0.2810(5)	-0.2489(4)	0.9128(3)	3.9(1)

Table 2. Anisotropic Displacement Parameters

atom	U ₁₁	U ₂₂	U ₃₃	U ₁₂	U ₁₃	U ₂₃
Si(1)	0.0192(6)	0.0191(6)	0.0177(6)	-0.0076(5)	-0.0035(5)	-0.0030(4)
Si(2)	0.0225(6)	0.0217(6)	0.0190(6)	-0.0077(5)	-0.0041(5)	-0.0021(4)
Si(3)	0.0250(6)	0.0226(6)	0.0206(6)	-0.0100(5)	-0.0058(5)	-0.0045(5)
Si(4)	0.0279(7)	0.0275(6)	0.0264(6)	-0.0133(5)	-0.0011(5)	-0.0001(5)
Si(5)	0.0260(6)	0.0229(6)	0.0271(6)	-0.0052(5)	-0.0091(5)	-0.0010(5)
Si(6)	0.0298(7)	0.0292(7)	0.0352(7)	-0.0062(5)	-0.0053(5)	-0.0151(5)
Si(7)	0.0270(7)	0.0404(7)	0.0266(6)	-0.0177(6)	-0.0045(5)	-0.0098(5)
C(1)	0.025(2)	0.029(2)	0.033(2)	-0.010(2)	-0.007(2)	-0.001(2)
C(2)	0.032(2)	0.036(2)	0.025(2)	-0.012(2)	-0.004(2)	-0.006(2)
C(3)	0.049(3)	0.032(2)	0.033(2)	-0.021(2)	-0.014(2)	0.001(2)
C(4)	0.038(3)	0.045(3)	0.040(3)	-0.019(2)	0.005(2)	-0.009(2)
C(5)	0.035(3)	0.039(3)	0.043(3)	-0.021(2)	0.000(2)	-0.007(2)
C(6)	0.053(3)	0.049(3)	0.039(3)	-0.026(2)	-0.006(2)	0.010(2)
C(7)	0.039(3)	0.027(2)	0.038(2)	-0.008(2)	-0.012(2)	-0.004(2)
C(8)	0.042(3)	0.034(3)	0.044(3)	-0.003(2)	-0.024(2)	-0.004(2)
C(9)	0.032(2)	0.032(2)	0.043(3)	-0.006(2)	-0.005(2)	-0.005(2)
C(10)	0.040(3)	0.050(3)	0.042(3)	-0.013(2)	0.003(2)	-0.021(2)
C(11)	0.037(3)	0.074(4)	0.069(3)	0.012(3)	-0.017(3)	-0.042(3)
C(12)	0.081(4)	0.042(3)	0.067(3)	-0.023(3)	0.002(3)	-0.027(3)
C(13)	0.027(2)	0.060(3)	0.046(3)	-0.010(2)	-0.008(2)	-0.021(2)
C(14)	0.045(3)	0.067(3)	0.032(2)	-0.026(2)	-0.010(2)	-0.016(2)
C(15)	0.047(3)	0.068(3)	0.049(3)	-0.040(3)	-0.009(2)	-0.007(2)

The general temperature factor expression:

$$\exp(-2\pi^2(a^*U_{11}h^2 + b^*U_{22}k^2 + c^*U_{33}l^2 + 2a^*b^*U_{12}hk + 2a^*c^*U_{13}hl + 2b^*c^*U_{23}kl))$$

Table 3. Bond Lengths(Å)

atom	atom	distance	atom	atom	distance
Si(1)	Si(1)	2.388(2)	Si(1)	Si(2)	2.407(1)
Si(1)	Si(3)	2.380(1)	Si(1)	C(1)	1.893(4)
Si(2)	Si(4)	2.365(1)	Si(2)	Si(5)	2.385(1)
Si(2)	C(2)	1.910(4)	Si(3)	Si(6)	2.365(1)
Si(3)	Si(7)	2.372(1)	Si(3)	C(3)	1.903(4)
Si(4)	C(4)	1.879(4)	Si(4)	C(5)	1.872(4)
Si(4)	C(6)	1.881(4)	Si(5)	C(7)	1.876(4)
Si(5)	C(8)	1.876(4)	Si(5)	C(9)	1.871(4)
Si(6)	C(10)	1.865(4)	Si(6)	C(11)	1.870(4)
Si(6)	C(12)	1.869(4)	Si(7)	C(13)	1.868(4)
Si(7)	C(14)	1.877(4)	Si(7)	C(15)	1.871(4)

Table 5. Bond Angles(°)

atom	atom	atom	angle	atom	atom	atom	angle
Si(1)	Si(1)	Si(2)	121.64(7)	Si(1)	Si(1)	Si(3)	108.59(6)
Si(1)	Si(1)	C(1)	104.5(1)	Si(2)	Si(1)	Si(3)	106.79(5)
Si(2)	Si(1)	C(1)	106.3(1)	Si(3)	Si(1)	C(1)	108.5(1)
Si(1)	Si(2)	Si(4)	109.90(5)	Si(1)	Si(2)	Si(5)	127.68(5)
Si(1)	Si(2)	C(2)	105.2(1)	Si(4)	Si(2)	Si(5)	107.25(5)
Si(4)	Si(2)	C(2)	99.7(1)	Si(5)	Si(2)	C(2)	103.4(1)
Si(1)	Si(3)	Si(6)	115.89(5)	Si(1)	Si(3)	Si(7)	117.29(5)
Si(1)	Si(3)	C(3)	105.5(1)	Si(6)	Si(3)	Si(7)	109.73(5)
Si(6)	Si(3)	C(3)	101.4(1)	Si(7)	Si(3)	C(3)	105.0(1)
Si(2)	Si(4)	C(4)	109.9(1)	Si(2)	Si(4)	C(5)	115.8(1)
Si(2)	Si(4)	C(6)	108.5(1)	C(4)	Si(4)	C(5)	108.9(2)
C(4)	Si(4)	C(6)	105.1(2)	C(5)	Si(4)	C(6)	108.1(2)
Si(2)	Si(5)	C(7)	112.6(1)	Si(2)	Si(5)	C(8)	105.3(1)
Si(2)	Si(5)	C(9)	117.0(1)	C(7)	Si(5)	C(8)	107.7(2)
C(7)	Si(5)	C(9)	108.1(2)	C(8)	Si(5)	C(9)	105.5(2)
Si(3)	Si(6)	C(10)	117.8(1)	Si(3)	Si(6)	C(11)	111.2(1)
Si(3)	Si(6)	C(12)	106.3(2)	C(10)	Si(6)	C(11)	106.6(2)
C(10)	Si(6)	C(12)	107.3(2)	C(11)	Si(6)	C(12)	107.1(2)
Si(3)	Si(7)	C(13)	114.1(1)	Si(3)	Si(7)	C(14)	112.9(1)
Si(3)	Si(7)	C(15)	106.9(1)	C(13)	Si(7)	C(14)	107.8(2)
C(13)	Si(7)	C(15)	107.9(2)	C(14)	Si(7)	C(15)	106.9(2)

Table 6. Bond Angles(°)

atom	atom	atom	angle	atom	atom	atom	angle
Si(1)	C(1)	H(1)	109.3	Si(1)	C(1)	H(2)	109.7
Si(1)	C(1)	H(3)	109.4	H(1)	C(1)	H(2)	109.5
H(1)	C(1)	H(3)	109.1	H(2)	C(1)	H(3)	109.7
Si(2)	C(2)	H(4)	109.4	Si(2)	C(2)	H(5)	109.3
Si(2)	C(2)	H(6)	109.5	H(4)	C(2)	H(5)	109.4
H(4)	C(2)	H(6)	109.7	H(5)	C(2)	H(6)	109.5
Si(3)	C(3)	H(7)	109.4	Si(3)	C(3)	H(8)	109.3
Si(3)	C(3)	H(9)	109.5	H(7)	C(3)	H(8)	109.4
H(7)	C(3)	H(9)	109.7	H(8)	C(3)	H(9)	109.6
Si(4)	C(4)	H(10)	109.1	Si(4)	C(4)	H(11)	109.5
Si(4)	C(4)	H(12)	109.3	H(10)	C(4)	H(11)	109.6
H(10)	C(4)	H(12)	109.4	H(11)	C(4)	H(12)	110.0
Si(4)	C(5)	H(13)	109.6	Si(4)	C(5)	H(14)	109.3
Si(4)	C(5)	H(15)	109.4	H(13)	C(5)	H(14)	109.4
H(13)	C(5)	H(15)	109.7	H(14)	C(5)	H(15)	109.4
Si(4)	C(6)	H(16)	109.3	Si(4)	C(6)	H(17)	109.8
Si(4)	C(6)	H(18)	109.0	H(16)	C(6)	H(17)	110.1
H(16)	C(6)	H(18)	108.9	H(17)	C(6)	H(18)	109.7
Si(5)	C(7)	H(19)	109.6	Si(5)	C(7)	H(20)	109.6
Si(5)	C(7)	H(21)	109.5	H(19)	C(7)	H(20)	109.6
H(19)	C(7)	H(21)	109.2	H(20)	C(7)	H(21)	109.4
Si(5)	C(8)	H(22)	109.7	Si(5)	C(8)	H(23)	109.6
Si(5)	C(8)	H(24)	109.6	H(22)	C(8)	H(23)	109.3
H(22)	C(8)	H(24)	109.2	H(23)	C(8)	H(24)	109.4

Table 6. Bond Angles(°) (continued)

atom	atom	atom	angle	atom	atom	atom	angle
Si(5)	C(9)	H(25)	109.2	Si(5)	C(9)	H(26)	109.6
Si(5)	C(9)	H(27)	109.3	H(25)	C(9)	H(26)	109.6
H(25)	C(9)	H(27)	109.1	H(26)	C(9)	H(27)	109.9
Si(6)	C(10)	H(28)	109.4	Si(6)	C(10)	H(29)	109.2
Si(6)	C(10)	H(30)	109.4	H(28)	C(10)	H(29)	109.5
H(28)	C(10)	H(30)	109.9	H(29)	C(10)	H(30)	109.4
Si(6)	C(11)	H(31)	109.5	Si(6)	C(11)	H(32)	109.3
Si(6)	C(11)	H(33)	109.7	H(31)	C(11)	H(32)	109.1
H(31)	C(11)	H(33)	109.8	H(32)	C(11)	H(33)	109.4
Si(6)	C(12)	H(34)	109.3	Si(6)	C(12)	H(35)	109.2
Si(6)	C(12)	H(36)	109.5	H(34)	C(12)	H(35)	109.3
H(34)	C(12)	H(36)	109.8	H(35)	C(12)	H(36)	109.6
Si(7)	C(13)	H(37)	109.0	Si(7)	C(13)	H(38)	109.2
Si(7)	C(13)	H(39)	109.7	H(37)	C(13)	H(38)	109.1
H(37)	C(13)	H(39)	109.9	H(38)	C(13)	H(39)	109.9
Si(7)	C(14)	H(40)	109.4	Si(7)	C(14)	H(41)	109.7
Si(7)	C(14)	H(42)	109.7	H(40)	C(14)	H(41)	109.1
H(40)	C(14)	H(42)	109.4	H(41)	C(14)	H(42)	109.6
Si(7)	C(15)	H(43)	109.3	Si(7)	C(15)	H(44)	109.5
Si(7)	C(15)	H(45)	109.4	H(43)	C(15)	H(44)	109.4
H(43)	C(15)	H(45)	109.5	H(44)	C(15)	H(45)	109.7

Table 7. Torsion Angles(°)

atom	atom	atom	atom	angle	atom	atom	atom	atom	angle
Si(1)	Si(1)	Si(2)	Si(4)	-118.51(8)	Si(1)	Si(1)	Si(2)	Si(5)	14.2(1)
Si(1)	Si(1)	Si(2)	C(2)	135.0(1)	Si(1)	Si(1)	Si(3)	Si(6)	147.12(6)
Si(1)	Si(1)	Si(3)	Si(7)	-80.62(8)	Si(1)	Si(1)	Si(3)	C(3)	35.9(1)
Si(1)	Si(2)	Si(4)	C(4)	61.0(1)	Si(1)	Si(2)	Si(4)	C(5)	-62.9(2)
Si(1)	Si(2)	Si(4)	C(6)	175.4(2)	Si(1)	Si(2)	Si(5)	C(7)	105.4(1)
Si(1)	Si(2)	Si(5)	C(8)	-137.5(1)	Si(1)	Si(2)	Si(5)	C(9)	-20.7(2)
Si(1)	Si(3)	Si(6)	C(10)	-74.0(2)	Si(1)	Si(3)	Si(6)	C(11)	49.4(2)
Si(1)	Si(3)	Si(6)	C(12)	165.7(2)	Si(1)	Si(3)	Si(7)	C(13)	-6.4(2)
Si(1)	Si(3)	Si(7)	C(14)	117.1(2)	Si(1)	Si(3)	Si(7)	C(15)	-125.6(2)
Si(2)	Si(1)	Si(1)	Si(2)	-180.0	Si(2)	Si(1)	Si(1)	Si(3)	-55.58(9)
Si(2)	Si(1)	Si(1)	C(1)	60.0(1)	Si(2)	Si(1)	Si(3)	Si(6)	80.07(7)
Si(2)	Si(1)	Si(3)	Si(7)	-52.19(7)	Si(2)	Si(1)	Si(3)	C(3)	-168.7(1)
Si(3)	Si(1)	Si(1)	Si(3)	180.0	Si(3)	Si(1)	Si(1)	C(1)	-64.4(1)
Si(3)	Si(1)	Si(2)	Si(4)	-116.25(6)	Si(3)	Si(1)	Si(2)	Si(5)	111.05(7)
Si(3)	Si(1)	Si(2)	C(2)	-9.8(1)	Si(4)	Si(2)	Si(1)	C(1)	-0.6(1)
Si(4)	Si(2)	Si(5)	C(7)	-28.3(1)	Si(4)	Si(2)	Si(5)	C(8)	88.8(1)
Si(4)	Si(2)	Si(5)	C(9)	-154.4(1)	Si(5)	Si(2)	Si(1)	C(1)	-133.3(1)
Si(5)	Si(2)	Si(4)	C(4)	-156.5(1)	Si(5)	Si(2)	Si(4)	C(5)	79.6(1)
Si(5)	Si(2)	Si(4)	C(6)	-42.1(2)	Si(6)	Si(3)	Si(1)	C(1)	-34.1(1)
Si(6)	Si(3)	Si(7)	C(13)	-141.4(2)	Si(6)	Si(3)	Si(7)	C(14)	-17.9(2)
Si(6)	Si(3)	Si(7)	C(15)	99.4(2)	Si(7)	Si(3)	Si(1)	C(1)	-166.4(1)
Si(7)	Si(3)	Si(6)	C(10)	61.6(2)	Si(7)	Si(3)	Si(6)	C(11)	-174.9(2)
Si(7)	Si(3)	Si(6)	C(12)	-58.7(2)	C(1)	Si(1)	Si(1)	C(1)	-180.0
C(1)	Si(1)	Si(2)	C(2)	105.9(2)	C(1)	Si(1)	Si(3)	C(3)	77.1(2)

Table 7. Torsion Angles(°) (continued)

atom	atom	atom	atom	angle	atom	atom	atom	atom	angle
C(2)	Si(2)	Si(4)	C(4)	-49.1(2)	C(2)	Si(2)	Si(4)	C(5)	-173.0(2)
C(2)	Si(2)	Si(4)	C(6)	65.2(2)	C(2)	Si(2)	Si(5)	C(7)	-133.0(2)
C(2)	Si(2)	Si(5)	C(8)	-15.9(2)	C(2)	Si(2)	Si(5)	C(9)	100.9(2)
C(3)	Si(3)	Si(6)	C(10)	172.3(2)	C(3)	Si(3)	Si(6)	C(11)	-64.3(2)
C(3)	Si(3)	Si(6)	C(12)	52.0(2)	C(3)	Si(3)	Si(7)	C(13)	110.3(2)
C(3)	Si(3)	Si(7)	C(14)	-126.1(2)	C(3)	Si(3)	Si(7)	C(15)	-8.9(2)