

SUPPORTING INFORMATION

Unexpected Reactivity of $\text{CH}(\text{3,5-Me}_2\text{Pz})_2(\text{CO})_3\text{WSnAr}_3$ (Pz = Pyrazol-1-yl; Ar = Phenyl or *p*-Tolyl) toward Hydrogen Halide

by Liang-Fu Tang*, Juan Hong and Zhen-Kang Wen

*Department of Chemistry, State Key Laboratory of Elemento-Organic Chemistry, Nankai University,
Tianjin 300071, People's Republic of China*

Supplementary Tables (Tables 1-5 = 6 Pages)

Table 1 Crystal data and structure refinement for $(C_6H_5)_2SnCH(3,5-Me_2Pz)_2W(CO)_3Cl$

Empirical formula	$C_{26}H_{25}ClN_4O_3SnW$
Formula	779.49
Temperature	293(2) K
Diffraction type	Bruker SMART CCD area detector
Wavelength	0.71073 Å
Crystal system	Monoclinic
Space group	$P2_1/n$
Unit cell dimensions	
a (Å)	10.446(4)
b (Å)	16.222(5)
c (Å)	16.152(4)
β (deg)	91.231(3)
Volume (Å ³), Z	2736.4(15), 4
Calculated density, g.cm ⁻³	1.892
Absorption coefficient, mm ⁻¹	5.245
Refinement method	Full-matrix least-squares on F^2
$F(000)$	1496
Crystal size, mm	0.10 x 0.08 x 0.06
θ range for data collection (deg)	1.78 to 28.01
Limiting indices	$-9 \leq h \leq 13$ $-21 \leq k \leq 21$ $-19 \leq l \leq 21$
Reflections collected / unique	17318 / 6540 [$R(int) = 0.0413$]
Completeness to θ (deg)	100 % (25)
Absorption correction	Semi-empirical from equivalents
Data / restraints / parameters	6540 / 0 / 329
Goodness-of-fit on F^2	0.995
Final R indices [$I > 2\sigma(I)$]	$R1 = 0.0323$ $wR2 = 0.0494$
R indices (all data)	$R1 = 0.0619$ $wR2 = 0.0565$
Largest diff. peak and hole (e. Å ⁻³)	1.222 and -0.978

Table 2 Atomic Coordinates ($\times 10^4$) and Equivalent Isotropic Displacement Parameters ($\text{\AA}^2 \times 10^3$). U(eq) is Defined as One Third of the Trace of the Orthogonalized U_{ij} Tensor.

Atom	x	y	z	U(eq)
W(1)	6037(1)	6248(1)	7552(1)	33(1)
Sn(1)	5819(1)	7978(1)	7843(1)	38(1)
Cl(1)	7321(1)	5025(1)	7074(1)	57(1)
C(1)	4447(4)	6703(2)	7969(3)	40(1)
O(1)	3434(3)	6868(2)	8229(2)	61(1)
C(2)	5758(4)	5684(3)	8613(3)	47(1)
O(2)	5550(4)	5389(2)	9243(2)	76(1)
C(3)	4644(5)	5631(3)	6967(3)	51(1)
O(3)	3836(4)	5254(2)	6664(2)	76(1)
N(1)	7970(3)	6706(2)	8014(2)	40(1)
N(2)	8489(3)	7409(2)	7669(2)	43(1)
N(3)	6660(3)	6849(2)	6358(2)	38(1)
N(4)	7370(4)	7566(2)	6383(2)	42(1)
C(4)	8944(5)	6360(3)	8460(3)	51(1)
C(5)	10031(5)	6836(4)	8384(4)	66(2)
C(6)	9740(5)	7491(3)	7888(4)	58(1)
C(7)	8807(5)	5574(3)	8939(3)	68(2)
C(8)	10529(5)	8198(4)	7593(4)	92(2)
C(9)	7640(4)	7929(3)	7180(3)	43(1)
C(10)	6562(5)	6651(3)	5546(3)	49(1)
C(11)	7166(5)	7252(3)	5081(3)	59(2)
C(12)	7679(5)	7819(3)	5616(3)	55(1)
C(13)	5929(6)	5890(4)	5226(3)	84(2)
C(14)	8469(7)	8569(3)	5465(4)	99(2)
C(15)	5966(5)	8355(3)	9101(3)	49(1)
C(16)	7042(8)	8233(4)	9572(4)	111(3)
C(17)	7109(11)	8436(5)	10403(5)	147(4)
C(18)	6063(11)	8748(5)	10788(4)	115(3)
C(19)	5010(8)	8915(5)	10329(5)	120(3)
C(20)	4950(7)	8703(4)	9477(4)	94(2)
C(21)	4438(5)	8655(3)	7126(3)	45(1)
C(22)	3876(6)	8309(4)	6447(4)	70(2)
C(23)	2950(7)	8719(5)	5987(4)	91(2)
C(24)	2574(6)	9487(5)	6194(5)	83(2)
C(25)	3114(6)	9847(4)	6858(5)	80(2)
C(26)	4061(5)	9445(3)	7334(3)	61(2)

Table 3 Bond Distances [\AA] and Angles [$^\circ$].

Bond distances (\AA)					
W(1)-C(1)	1.950(5)	N(1)-C(4)	1.356(6)	C(11)-C(12)	1.363(7)
W(1)-C(2)	1.970(5)	N(1)-N(2)	1.384(5)	C(12)-C(14)	1.493(6)
W(1)-C(3)	1.989(5)	N(2)-C(6)	1.353(6)	C(15)-C(20)	1.357(7)
W(1)-N(1)	2.263(4)	N(2)-C(9)	1.446(6)	C(15)-C(16)	1.358(8)
W(1)-N(3)	2.268(3)	N(3)-C(10)	1.352(5)	C(16)-C(17)	1.383(9)
W(1)-Cl(1)	2.5254(12)	N(3)-N(4)	1.380(4)	C(17)-C(18)	1.366(11)
W(1)-Sn(1)	2.8547(9)	N(4)-C(12)	1.350(5)	C(18)-C(19)	1.340(11)
Sn(1)-C(15)	2.125(5)	N(4)-C(9)	1.438(5)	C(19)-C(20)	1.419(9)
Sn(1)-C(21)	2.135(5)	C(4)-C(5)	1.380(7)	C(21)-C(22)	1.354(7)
Sn(1)-C(9)	2.204(4)	C(4)-C(7)	1.499(7)	C(21)-C(26)	1.383(6)
Sn(1)-C(1)	2.527(4)	C(5)-C(6)	1.362(7)	C(22)-C(23)	1.378(8)
C(1)-O(1)	1.177(5)	C(6)-C(8)	1.496(7)	C(23)-C(24)	1.352(8)
C(2)-O(2)	1.149(5)	C(10)-C(11)	1.390(6)	C(24)-C(25)	1.335(8)
C(3)-O(3)	1.144(5)	C(10)-C(13)	1.488(7)	C(25)-C(26)	1.401(8)
Angles ($^\circ$)					
C(1)-W(1)-C(2)	74.45(18)	C(9)-Sn(1)-W(1)	79.16(11)	N(4)-C(9)-N(2)	110.9(3)
C(1)-W(1)-C(3)	74.64(19)	C(1)-Sn(1)-W(1)	41.94(10)	N(4)-C(9)-Sn(1)	107.1(3)
C(2)-W(1)-C(3)	93.36(19)	O(1)-C(1)-W(1)	170.9(4)	N(2)-C(9)-Sn(1)	106.4(3)
C(1)-W(1)-N(1)	121.48(16)	O(1)-C(1)-Sn(1)	111.0(3)	N(3)-C(10)-C(11)	109.4(4)
C(2)-W(1)-N(1)	90.78(17)	W(1)-C(1)-Sn(1)	78.05(15)	N(3)-C(10)-C(13)	123.9(4)
C(3)-W(1)-N(1)	163.86(16)	O(2)-C(2)-W(1)	176.2(4)	C(11)-C(10)-C(13)	126.7(5)
C(1)-W(1)-N(3)	113.17(16)	O(3)-C(3)-W(1)	176.8(4)	C(12)-C(11)-C(10)	107.9(4)
C(2)-W(1)-N(3)	171.74(16)	C(4)-N(1)-N(2)	105.0(4)	N(4)-C(12)-C(11)	106.2(4)
C(3)-W(1)-N(3)	91.86(16)	C(4)-N(1)-W(1)	133.9(3)	N(4)-C(12)-C(14)	122.8(5)
N(1)-W(1)-N(3)	82.49(13)	N(2)-N(1)-W(1)	119.5(3)	C(11)-C(12)-C(14)	131.1(5)
C(1)-W(1)-Cl(1)	149.82(12)	C(6)-N(2)-N(1)	111.1(4)	C(20)-C(15)-C(16)	117.1(5)
C(2)-W(1)-Cl(1)	89.44(13)	C(6)-N(2)-C(9)	131.5(4)	C(20)-C(15)-Sn(1)	120.4(4)
C(3)-W(1)-Cl(1)	81.17(14)	N(1)-N(2)-C(9)	117.3(3)	C(16)-C(15)-Sn(1)	122.4(4)
N(1)-W(1)-Cl(1)	83.28(9)	C(10)-N(3)-N(4)	104.9(3)	C(15)-C(16)-C(17)	122.2(7)
N(3)-W(1)-Cl(1)	85.03(9)	C(10)-N(3)-W(1)	134.9(3)	C(18)-C(17)-C(16)	120.4(8)
C(1)-W(1)-Sn(1)	60.00(12)	N(4)-N(3)-W(1)	120.1(3)	C(19)-C(18)-C(17)	118.6(7)
C(2)-W(1)-Sn(1)	107.46(13)	C(12)-N(4)-N(3)	111.6(4)	C(18)-C(19)-C(20)	120.4(8)
C(3)-W(1)-Sn(1)	120.88(14)	C(12)-N(4)-C(9)	130.6(4)	C(15)-C(20)-C(19)	121.1(7)
N(1)-W(1)-Sn(1)	72.35(9)	N(3)-N(4)-C(9)	117.8(3)	C(22)-C(21)-C(26)	117.4(5)
N(3)-W(1)-Sn(1)	75.12(8)	N(1)-C(4)-C(5)	109.3(5)	C(22)-C(21)-Sn(1)	120.1(4)
Cl(1)-W(1)-Sn(1)	150.16(3)	N(1)-C(4)-C(7)	123.2(5)	C(26)-C(21)-Sn(1)	122.5(4)
C(15)-Sn(1)-C(21)	113.9(2)	C(5)-C(4)-C(7)	127.5(5)	C(21)-C(22)-C(23)	121.6(6)
C(15)-Sn(1)-C(9)	115.43(19)	C(6)-C(5)-C(4)	108.4(5)	C(24)-C(23)-C(22)	121.0(7)
C(21)-Sn(1)-C(9)	109.62(17)	N(2)-C(6)-C(5)	106.2(5)	C(25)-C(24)-C(23)	118.9(6)
C(15)-Sn(1)-C(1)	100.79(17)	N(2)-C(6)-C(8)	121.8(5)	C(24)-C(25)-C(26)	121.2(6)
C(21)-Sn(1)-C(1)	95.02(17)	C(5)-C(6)-C(8)	132.0(5)	C(21)-C(26)-C(25)	120.0(6)
C(9)-Sn(1)-C(1)	120.44(15)	C(15)-Sn(1)-W(1)	115.81(13)	C(21)-Sn(1)-W(1)	118.17(13)

Table 4 Anisotropic Displacement Parameters ($\text{\AA}^2 \times 10^3$). The Anisotropic Displacement Factor Exponent Takes the Form: $-2\pi^2 \cdot [h^2 \cdot a^{*2} \cdot U11 + \dots + 2h \cdot k \cdot a^* \cdot b^* \cdot U12]$.

Atom	U11	U22	U33	U23	U13	U12
W(1)	37(1)	25(1)	37(1)	0(1)	8(1)	-3(1)
Sn(1)	44(1)	29(1)	40(1)	-3(1)	4(1)	2(1)
Cl(1)	63(1)	33(1)	75(1)	-3(1)	19(1)	9(1)
C(1)	43(3)	30(2)	47(3)	2(2)	10(2)	-3(2)
O(1)	44(2)	57(2)	83(3)	-6(2)	20(2)	0(2)
C(2)	40(3)	41(3)	59(3)	3(2)	12(2)	3(2)
O(2)	81(3)	85(3)	64(2)	37(2)	29(2)	15(2)
C(3)	53(3)	46(3)	54(3)	-4(2)	14(3)	-12(3)
O(3)	72(3)	84(3)	72(3)	-18(2)	2(2)	-34(2)
N(1)	40(2)	36(2)	44(2)	-2(2)	4(2)	1(2)
N(2)	39(2)	38(2)	52(2)	-6(2)	5(2)	-6(2)
N(3)	47(2)	31(2)	37(2)	-1(2)	9(2)	-8(2)
N(4)	59(3)	29(2)	38(2)	1(2)	12(2)	-6(2)
C(4)	49(3)	55(3)	48(3)	-6(3)	-3(2)	11(3)
C(5)	43(3)	72(4)	82(4)	-12(3)	-15(3)	7(3)
C(6)	38(3)	56(3)	80(4)	-21(3)	1(3)	-8(3)
C(7)	61(3)	83(4)	61(4)	21(3)	4(3)	26(3)
C(8)	47(3)	77(4)	151(7)	-4(4)	1(4)	-27(3)
C(9)	50(3)	28(2)	51(3)	-1(2)	9(2)	-8(2)
C(10)	57(3)	53(3)	38(3)	-6(2)	6(2)	-5(3)
C(11)	82(4)	62(3)	34(3)	9(3)	15(3)	3(3)
C(12)	78(4)	38(3)	50(3)	6(2)	24(3)	-5(3)
C(13)	109(5)	90(4)	53(4)	-28(3)	14(4)	-39(4)
C(14)	144(7)	67(4)	86(5)	21(4)	37(5)	-39(4)
C(15)	66(4)	38(3)	44(3)	-8(2)	3(3)	-8(2)
C(16)	144(7)	112(6)	75(5)	-46(4)	-28(5)	56(5)
C(17)	207(10)	135(7)	94(7)	-52(6)	-68(7)	80(7)
C(18)	191(10)	102(6)	53(4)	-28(4)	-10(6)	-8(7)
C(19)	110(6)	172(8)	78(5)	-59(6)	40(5)	-39(6)
C(20)	77(4)	141(6)	66(4)	-33(4)	14(4)	-20(5)
C(21)	49(3)	36(3)	48(3)	4(2)	10(2)	6(2)
C(22)	86(4)	59(4)	65(4)	7(3)	-13(3)	19(3)
C(23)	96(5)	105(6)	72(5)	16(4)	-22(4)	5(5)
C(24)	61(4)	103(6)	86(5)	46(5)	9(4)	19(4)
C(25)	78(5)	63(4)	103(5)	33(4)	40(4)	39(4)
C(26)	58(3)	52(3)	73(4)	5(3)	18(3)	14(3)

Table 5 Torsion Angles [$^{\circ}$].

C(1)-W(1)-Sn(1)-C(15)	76.9(2)	Sn(1)-W(1)-N(1)-C(4)	149.5(4)
C(2)-W(1)-Sn(1)-C(15)	17.3(2)	C(1)-W(1)-N(1)-N(2)	-83.4(3)
C(3)-W(1)-Sn(1)-C(15)	122.3(2)	C(2)-W(1)-N(1)-N(2)	-155.6(3)
N(1)-W(1)-Sn(1)-C(15)	-67.86(19)	C(3)-W(1)-N(1)-N(2)	99.5(6)
N(3)-W(1)-Sn(1)-C(15)	-154.56(19)	N(3)-W(1)-N(1)-N(2)	29.2(3)
Cl(1)-W(1)-Sn(1)-C(15)	-104.59(18)	Cl(1)-W(1)-N(1)-N(2)	115.1(3)
C(1)-W(1)-Sn(1)-C(21)	-63.4(2)	Sn(1)-W(1)-N(1)-N(2)	-47.5(3)
C(2)-W(1)-Sn(1)-C(21)	-123.0(2)	C(4)-N(1)-N(2)-C(6)	0.4(5)
C(3)-W(1)-Sn(1)-C(21)	-18.0(2)	W(1)-N(1)-N(2)-C(6)	-167.0(3)
N(1)-W(1)-Sn(1)-C(21)	151.85(16)	C(4)-N(1)-N(2)-C(9)	-177.5(4)
N(3)-W(1)-Sn(1)-C(21)	65.15(17)	W(1)-N(1)-N(2)-C(9)	15.1(5)
Cl(1)-W(1)-Sn(1)-C(21)	115.12(15)	C(1)-W(1)-N(3)-C(10)	-98.8(4)
C(1)-W(1)-Sn(1)-C(9)	-170.0(2)	C(2)-W(1)-N(3)-C(10)	104.4(11)
C(2)-W(1)-Sn(1)-C(9)	130.40(19)	C(3)-W(1)-N(3)-C(10)	-24.8(5)
C(3)-W(1)-Sn(1)-C(9)	-124.5(2)	N(1)-W(1)-N(3)-C(10)	140.1(4)
N(1)-W(1)-Sn(1)-C(9)	45.28(16)	Cl(1)-W(1)-N(3)-C(10)	56.2(4)
N(3)-W(1)-Sn(1)-C(9)	-41.42(16)	Sn(1)-W(1)-N(3)-C(10)	-146.3(4)
Cl(1)-W(1)-Sn(1)-C(9)	8.55(14)	C(1)-W(1)-N(3)-N(4)	85.3(3)
C(2)-W(1)-Sn(1)-C(1)	-59.6(2)	C(2)-W(1)-N(3)-N(4)	-71.4(11)
C(3)-W(1)-Sn(1)-C(1)	45.4(2)	C(3)-W(1)-N(3)-N(4)	159.4(3)
N(1)-W(1)-Sn(1)-C(1)	-144.73(19)	N(1)-W(1)-N(3)-N(4)	-35.8(3)
N(3)-W(1)-Sn(1)-C(1)	128.57(19)	Cl(1)-W(1)-N(3)-N(4)	-119.6(3)
Cl(1)-W(1)-Sn(1)-C(1)	178.54(17)	Sn(1)-W(1)-N(3)-N(4)	37.9(3)
C(2)-W(1)-C(1)-O(1)	-54(3)	C(10)-N(3)-N(4)-C(12)	1.3(5)
C(3)-W(1)-C(1)-O(1)	44(3)	W(1)-N(3)-N(4)-C(12)	178.3(3)
N(1)-W(1)-C(1)-O(1)	-135(3)	C(10)-N(3)-N(4)-C(9)	-179.7(4)
N(3)-W(1)-C(1)-O(1)	130(3)	W(1)-N(3)-N(4)-C(9)	-2.7(5)
Cl(1)-W(1)-C(1)-O(1)	6(3)	N(2)-N(1)-C(4)-C(5)	-0.4(5)
Sn(1)-W(1)-C(1)-O(1)	-175(3)	W(1)-N(1)-C(4)-C(5)	164.4(3)
C(2)-W(1)-C(1)-Sn(1)	121.35(18)	N(2)-N(1)-C(4)-C(7)	-179.6(4)
C(3)-W(1)-C(1)-Sn(1)	-140.64(18)	W(1)-N(1)-C(4)-C(7)	-14.9(7)
N(1)-W(1)-C(1)-Sn(1)	40.19(19)	N(1)-C(4)-C(5)-C(6)	0.2(6)
N(3)-W(1)-C(1)-Sn(1)	-55.28(16)	C(7)-C(4)-C(5)-C(6)	179.4(5)
Cl(1)-W(1)-C(1)-Sn(1)	-178.55(17)	N(1)-N(2)-C(6)-C(5)	-0.3(5)
C(15)-Sn(1)-C(1)-O(1)	62.3(4)	C(9)-N(2)-C(6)-C(5)	177.2(5)
C(21)-Sn(1)-C(1)-O(1)	-53.2(4)	N(1)-N(2)-C(6)-C(8)	179.6(5)
C(9)-Sn(1)-C(1)-O(1)	-169.4(3)	C(9)-N(2)-C(6)-C(8)	-2.9(8)
W(1)-Sn(1)-C(1)-O(1)	179.2(5)	C(4)-C(5)-C(6)-N(2)	0.0(6)
C(15)-Sn(1)-C(1)-W(1)	-116.82(19)	C(4)-C(5)-C(6)-C(8)	-179.9(6)
C(21)-Sn(1)-C(1)-W(1)	127.68(17)	C(12)-N(4)-C(9)-N(2)	-114.1(5)
C(9)-Sn(1)-C(1)-W(1)	11.4(2)	N(3)-N(4)-C(9)-N(2)	67.2(5)

C(1)-W(1)-C(2)-O(2)	-19(7)	C(12)-N(4)-C(9)-Sn(1)	130.3(5)
C(3)-W(1)-C(2)-O(2)	-92(7)	N(3)-N(4)-C(9)-Sn(1)	-48.4(4)
N(1)-W(1)-C(2)-O(2)	103(7)	C(6)-N(2)-C(9)-N(4)	107.4(5)
N(3)-W(1)-C(2)-O(2)	139(6)	N(1)-N(2)-C(9)-N(4)	-75.2(4)
Cl(1)-W(1)-C(2)-O(2)	-173(7)	C(6)-N(2)-C(9)-Sn(1)	-136.5(4)
Sn(1)-W(1)-C(2)-O(2)	32(7)	N(1)-N(2)-C(9)-Sn(1)	40.9(4)
C(1)-W(1)-C(3)-O(3)	-77(8)	C(15)-Sn(1)-C(9)-N(4)	172.9(3)
C(2)-W(1)-C(3)-O(3)	-5(8)	C(21)-Sn(1)-C(9)-N(4)	-56.9(3)
N(1)-W(1)-C(3)-O(3)	100(8)	C(1)-Sn(1)-C(9)-N(4)	51.6(3)
N(3)-W(1)-C(3)-O(3)	169(8)	W(1)-Sn(1)-C(9)-N(4)	59.3(3)
Cl(1)-W(1)-C(3)-O(3)	84(8)	C(15)-Sn(1)-C(9)-N(2)	54.2(3)
Sn(1)-W(1)-C(3)-O(3)	-117(8)	C(21)-Sn(1)-C(9)-N(2)	-175.6(3)
C(1)-W(1)-N(1)-C(4)	113.6(4)	C(1)-Sn(1)-C(9)-N(2)	-67.1(3)
C(2)-W(1)-N(1)-C(4)	41.4(4)	W(1)-Sn(1)-C(9)-N(2)	-59.3(2)
C(3)-W(1)-N(1)-C(4)	-63.5(8)	N(4)-N(3)-C(10)-C(11)	-1.9(5)
N(3)-W(1)-N(1)-C(4)	-133.8(4)	W(1)-N(3)-C(10)-C(11)	-178.2(3)
Cl(1)-W(1)-N(1)-C(4)	-48.0(4)	N(4)-N(3)-C(10)-C(13)	176.5(5)
C(21)-Sn(1)-C(15)-C(16)	-155.6(5)	W(1)-N(3)-C(10)-C(13)	0.2(8)
C(9)-Sn(1)-C(15)-C(16)	-27.5(6)	N(3)-C(10)-C(11)-C(12)	1.8(6)
C(1)-Sn(1)-C(15)-C(16)	103.9(6)	C(13)-C(10)-C(11)-C(12)	-176.6(5)
W(1)-Sn(1)-C(15)-C(16)	62.4(6)	N(3)-N(4)-C(12)-C(11)	-0.3(6)
C(20)-C(15)-C(16)-C(17)	1.2(11)	C(9)-N(4)-C(12)-C(11)	-179.0(5)
Sn(1)-C(15)-C(16)-C(17)	-176.2(7)	N(3)-N(4)-C(12)-C(14)	-178.7(5)
C(15)-C(16)-C(17)-C(18)	1.9(14)	C(9)-N(4)-C(12)-C(14)	2.6(8)
C(16)-C(17)-C(18)-C(19)	-5.3(15)	C(10)-C(11)-C(12)-N(4)	-0.9(6)
C(17)-C(18)-C(19)-C(20)	5.4(14)	C(10)-C(11)-C(12)-C(14)	177.3(6)
C(16)-C(15)-C(20)-C(19)	-1.1(10)	C(21)-Sn(1)-C(15)-C(20)	27.0(5)
Sn(1)-C(15)-C(20)-C(19)	176.4(5)	C(9)-Sn(1)-C(15)-C(20)	155.1(4)
C(18)-C(19)-C(20)-C(15)	-2.3(12)	C(1)-Sn(1)-C(15)-C(20)	-73.5(5)
C(15)-Sn(1)-C(21)-C(22)	-154.1(4)	W(1)-Sn(1)-C(15)-C(20)	-115.0(4)
C(9)-Sn(1)-C(21)-C(22)	74.9(4)	W(1)-Sn(1)-C(21)-C(26)	165.6(3)
C(1)-Sn(1)-C(21)-C(22)	-49.9(4)	C(26)-C(21)-C(22)-C(23)	-0.9(8)
W(1)-Sn(1)-C(21)-C(22)	-13.1(5)	Sn(1)-C(21)-C(22)-C(23)	177.8(5)
C(15)-Sn(1)-C(21)-C(26)	24.6(4)	C(21)-C(22)-C(23)-C(24)	0.4(10)
C(9)-Sn(1)-C(21)-C(26)	-106.4(4)	C(22)-C(23)-C(24)-C(25)	-0.1(10)
C(1)-Sn(1)-C(21)-C(26)	128.8(4)	C(23)-C(24)-C(25)-C(26)	0.4(9)
Sn(1)-C(21)-C(26)-C(25)	-177.5(4)	C(22)-C(21)-C(26)-C(25)	1.2(7)
C(24)-C(25)-C(26)-C(21)	-1.0(8)		

The End.