1$^{+}SbCl_6^{-}(THF)_{0.5}$

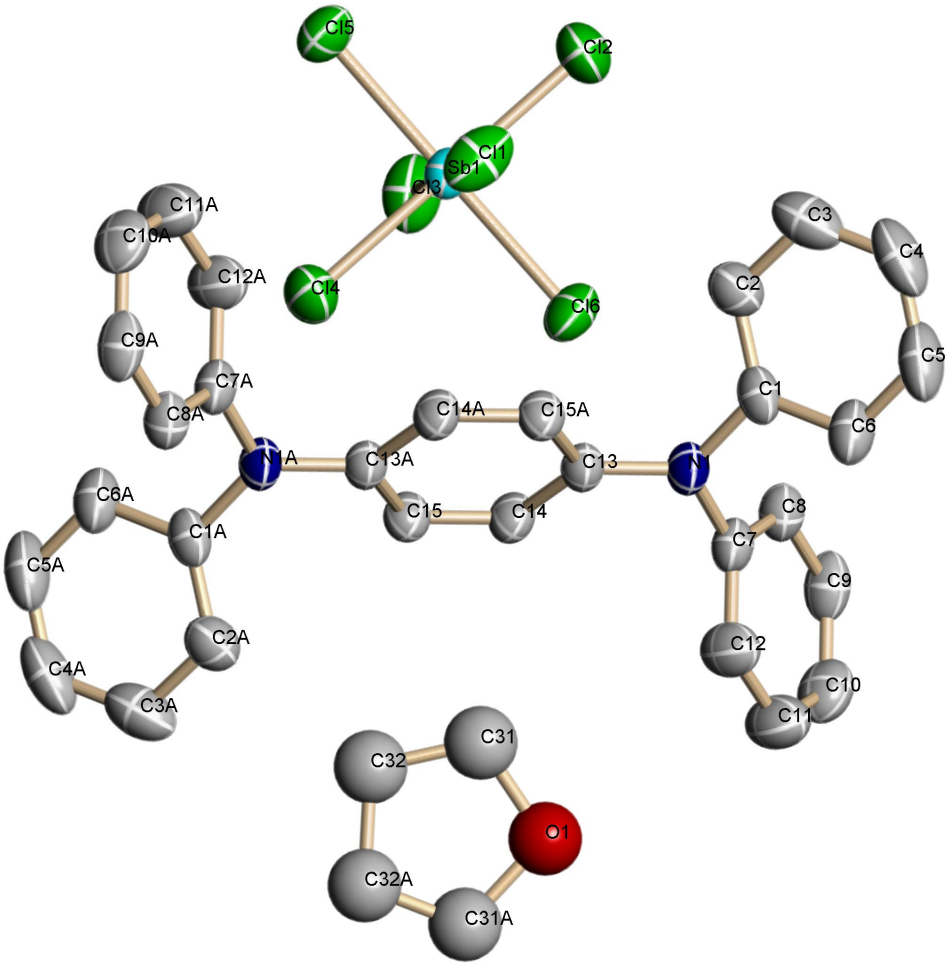

Table 1. Crystal data and structure refinement for **1**$^{+}SbCl_6^{-}(THF)_{0.5}$.

Crystal Data ;

Empirical formula ;2(C30 H24 N2), C4 H8 O, 2(Cl6 Sb)
Formula weight ;1566.05

Crystal size ;0.63 x 0.13 x 0.07 mm

Crystal description ;platelike rod

Crystal colour ;black

Crystal system;Monoclinic

Space group ;C 2/c

Unit cell dimensions ;a = 22.713(2) A alpha = 90 deg.
;b = 17.6662(10) A beta = 111.431(10) deg.
;c = 18.0240(17) A gamma = 90 deg.

Volume ;6732.1(11) A^3

Z, Calculated density ;4, 1.545 Mg/m^3

Absorption coefficient ;1.32 mm^-1

F(000) ;3128

Data Collection ;

Measurement device type ;STOE-IPDS diffractometer

Measuremnet method ;rotation

Temperature ;173(1) K

Wavelength ;0.71073 A

Monochromator ; graphite

Theta range for data collection ;1.93 to 25.75 deg.

Index ranges ;-27<=h<=27, -21<=k<=21, -22<=l<=21

Reflections collected / unique ;32276 / 6418 [R(int) = 0.0685]

Reflections greater >4sigma(i);3756

Absorption correction ;Numerical

Max. and min. transmission ;0.9221 and 0.6041

Refinement ;

Refinement method ;Full-matrix least-squares on F^2

Hydrogen treatment ;constr

Data / restraints / parameters ;6418 / 0 / 362

Goodness-of-fit on F^2 ;0.933

Final R indices [I>2sigma(I)] ;R1 = 0.0353, wR2 = 0.0946

R indices (all data) ;R1 = 0.0635, wR2 = 0.1043

Absolute structure parameter ;?

Largest diff. peak and hole ;0.738 and -0.694 e.A^-3

Table 2. Atomic coordinates (x 10^4) and equivalent isotropic displacement parameters (A^2 x 10^3) for **1**$^{+}$SbCl$_{6}^{-}$(THF)$_{0.5}$. U(eq) is defined as one third of the trace of the orthogonalized Uij tensor.

	x	y	z	U(eq)
N(1)	2575(1)	-4067(1)	10019(2)	35(1)
C(1)	3111(2)	-4470(2)	10552(2)	37(1)
C(2)	3718(2)	-4255(2)	10647(2)	46(1)
C(3)	4222(2)	-4668(3)	11170(3)	61(2)
C(4)	4116(3)	-5281(2)	11571(3)	63(2)
C(5)	3517(3)	-5487(2)	11469(2)	61(2)
C(6)	3005(2)	-5089(2)	10960(2)	47(1)
C(7)	2067(2)	-4514(2)	9477(2)	35(1)
C(8)	2182(2)	-4965(2)	8918(2)	38(1)
C(9)	1697(2)	-5411(2)	8418(2)	46(1)
C(10)	1114(2)	-5417(2)	8483(2)	53(1)
C(11)	1014(2)	-4975(2)	9057(3)	61(2)
C(12)	1487(2)	-4515(2)	9552(2)	51(1)
C(13)	2538(2)	-3295(2)	10010(2)	31(1)
C(14)	2114(2)	-2909(2)	9343(2)	35(1)
C(15)	2075(2)	-2141(2)	9332(2)	34(1)
N(2)	1631(1)	-2500(2)	5748(2)	35(1)
C(16)	1404(2)	-3204(2)	5938(2)	36(1)
C(17)	776(2)	-3389(2)	5563(3)	55(1)
C(18)	560(2)	-4078(3)	5723(3)	77(2)
C(19)	969(3)	-4565(3)	6258(3)	73(2)
C(20)	1590(2)	-4377(2)	6631(3)	63(2)
C(21)	1815(2)	-3697(2)	6475(2)	48(1)
C(22)	1430(2)	-1811(2)	6003(2)	36(1)
C(23)	1083(2)	-1284(2)	5465(2)	58(2)
C(24)	908(2)	-619(2)	5723(3)	67(2)
C(25)	1087(2)	-475(2)	6520(3)	62(2)
C(26)	1435(3)	-999(3)	7061(3)	73(2)
C(27)	1608(2)	-1671(2)	6806(2)	61(1)
C(28)	2057(1)	-2500(2)	5378(2)	32(1)
C(29)	2176(2)	-3165(2)	5015(2)	38(1)
C(30)	2607(2)	-3163(2)	4661(2)	37(1)
O(1)	0	-3578(13)	7500	374(11)
C(31)	547(6)	-3046(7)	7672(7)	202(5)
C(32)	343(6)	-2271(8)	7528(10)	250(7)
Sb(1)	3895(1)	-2497(1)	8450(1)	34(1)
Cl(1)	4225(1)	-2468(1)	9855(1)	60(1)
Cl(2)	4646(1)	-3446(1)	8531(1)	63(1)
Cl(3)	3537(1)	-2493(1)	7060(1)	63(1)
Cl(4)	3146(1)	-1540(1)	8394(1)	56(1)
Cl(5)	4646(1)	-1552(1)	8493(1)	51(1)
Cl(6)	3149(1)	-3453(1)	8408(1)	49(1)

Table 3. Bond lengths [A] and angles [deg] for **1**$^{+}SbCl_6^{-}(THF)_{0.5}$.

Sb(1)-Cl(4);2.3752(11)
Sb(1)-Cl(5);2.3681(11)
Sb(1)-Cl(6);2.3749(11)
Sb(1)-Cl(3);2.3336(10)
Sb(1)-Cl(1);2.3647(9)
Sb(1)-Cl(2);2.3578(12)
O(1)-C(31);1.50(2)
N(1)-C(13);1.367(4)
N(1)-C(7);1.445(5)
N(1)-C(1);1.433(5)
N(2)-C(28);1.360(4)
N(2)-C(22);1.436(5)
N(2)-C(16);1.435(5)
C(1)-C(2);1.380(6)
C(1)-C(6);1.387(5)
C(2)-C(3);1.394(6)
C(3)-C(4);1.371(7)
C(4)-C(5);1.354(10)
C(5)-C(6);1.382(6)
C(7)-C(8);1.383(5)
C(7)-C(12);1.373(6)
C(8)-C(9);1.386(5)
C(9)-C(10);1.371(7)
C(10)-C(11);1.380(6)
C(11)-C(12);1.382(6)
C(13)-C(15)#1;1.418(5)
C(13)-C(14);1.412(5)
C(14)-C(15);1.358(5)
C(2)-H(2A);0.9306
C(3)-H(3A);0.9307
C(4)-H(4A);0.9298
C(5)-H(5A);0.9292
C(6)-H(6A);0.9297
C(8)-H(8A);0.9304
C(9)-H(9A);0.9294
C(10)-H(10A);0.9315
C(11)-H(11A);0.9314
C(12)-H(12A);0.9295
C(14)-H(14);0.9293
C(15)-H(15);0.9300
C(16)-C(21);1.381(5)
C(16)-C(17);1.376(6)
C(17)-C(18);1.382(6)
C(18)-C(19);1.371(8)
C(19)-C(20);1.363(8)
C(20)-C(21);1.375(5)
C(22)-C(27);1.375(5)
C(22)-C(23);1.367(5)
C(23)-C(24);1.375(5)
C(24)-C(25);1.366(7)
C(25)-C(26);1.367(7)
C(26)-C(27);1.381(7)
C(28)-C(29);1.418(5)
C(28)-C(30)#2;1.414(5)
C(29)-C(30);1.350(5)
C(17)-H(17A);0.9297
C(18)-H(18A);0.9312
C(19)-H(19A);0.9303
C(20)-H(20A);0.9299

C(21)-H(21A);0.9311
C(23)-H(23A);0.9297
C(24)-H(24A);0.9292
C(25)-H(25A);0.9313
C(26)-H(26A);0.9285
C(27)-H(27A);0.9311
C(29)-H(29);0.9299
C(30)-H(30);0.9309
C(31)-C(32);1.438(19)
C(32)-C(32)#3;1.52(2)
C(31)-H(31A);0.9706
C(31)-H(31B);0.9689
C(32)-H(32B);0.9702
C(32)-H(32A);0.9691

Cl(1)-Sb(1)-Cl(2);90.61(5)
Cl(1)-Sb(1)-Cl(3);177.70(5)
Cl(1)-Sb(1)-Cl(4);88.37(4)
Cl(1)-Sb(1)-Cl(5);90.39(4)
Cl(1)-Sb(1)-Cl(6);89.58(4)
Cl(2)-Sb(1)-Cl(3);91.68(5)
Cl(2)-Sb(1)-Cl(4);178.97(4)
Cl(2)-Sb(1)-Cl(5);90.16(4)
Cl(2)-Sb(1)-Cl(6);89.34(4)
Cl(3)-Sb(1)-Cl(4);89.35(4)
Cl(3)-Sb(1)-Cl(5);89.89(4)
Cl(3)-Sb(1)-Cl(6);90.16(4)
Cl(4)-Sb(1)-Cl(5);89.76(4)
Cl(4)-Sb(1)-Cl(6);90.73(4)
Cl(5)-Sb(1)-Cl(6);179.50(4)
C(31)-O(1)-C(31)#3;102.2(15)
C(1)-N(1)-C(7);117.0(3)
C(1)-N(1)-C(13);122.5(3)
C(7)-N(1)-C(13);120.5(3)
C(16)-N(2)-C(22);118.3(3)
C(16)-N(2)-C(28);120.0(3)
C(22)-N(2)-C(28);121.6(3)
C(2)-C(1)-C(6);120.6(3)
N(1)-C(1)-C(2);120.8(3)
N(1)-C(1)-C(6);118.6(4)
C(1)-C(2)-C(3);118.5(4)
C(2)-C(3)-C(4);120.7(5)
C(3)-C(4)-C(5);120.1(5)
C(4)-C(5)-C(6);120.9(4)
C(1)-C(6)-C(5);119.1(4)
N(1)-C(7)-C(8);119.3(4)
N(1)-C(7)-C(12);119.5(3)
C(8)-C(7)-C(12);121.1(3)
C(7)-C(8)-C(9);118.9(4)
C(8)-C(9)-C(10);120.8(3)
C(9)-C(10)-C(11);119.2(4)
C(10)-C(11)-C(12);121.0(4)
C(7)-C(12)-C(11);119.0(4)
C(14)-C(13)-C(15)#1;118.1(3)
N(1)-C(13)-C(14);120.8(3)
N(1)-C(13)-C(15)#1;121.1(3)
C(13)-C(14)-C(15);121.0(3)
C(13)#1-C(15)-C(14);120.9(3)
C(1)-C(2)-H(2A);120.70
C(3)-C(2)-H(2A);120.81
C(4)-C(3)-H(3A);119.64
C(2)-C(3)-H(3A);119.64
C(5)-C(4)-H(4A);119.96

C(3)-C(4)-H(4A);119.92
C(6)-C(5)-H(5A);119.62
C(4)-C(5)-H(5A);119.49
C(1)-C(6)-H(6A);120.42
C(5)-C(6)-H(6A);120.45
C(7)-C(8)-H(8A);120.62
C(9)-C(8)-H(8A);120.48
C(8)-C(9)-H(9A);119.68
C(10)-C(9)-H(9A);119.50
C(11)-C(10)-H(10A);120.31
C(9)-C(10)-H(10A);120.45
C(10)-C(11)-H(11A);119.51
C(12)-C(11)-H(11A);119.48
C(11)-C(12)-H(12A);120.50
C(7)-C(12)-H(12A);120.54
C(15)-C(14)-H(14);119.52
C(13)-C(14)-H(14);119.49
C(14)-C(15)-H(15);119.54
C(13)#1-C(15)-H(15);119.59
N(2)-C(16)-C(21);120.2(3)
N(2)-C(16)-C(17);119.2(3)
C(17)-C(16)-C(21);120.6(3)
C(16)-C(17)-C(18);119.4(4)
C(17)-C(18)-C(19);119.9(5)

C(18)-C(19)-C(20);120.5(5)
C(19)-C(20)-C(21);120.5(4)
C(16)-C(21)-C(20);119.2(4)
N(2)-C(22)-C(27);118.9(3)
C(23)-C(22)-C(27);119.8(3)
N(2)-C(22)-C(23);121.3(3)
C(22)-C(23)-C(24);120.3(4)
C(23)-C(24)-C(25);120.2(4)
C(24)-C(25)-C(26);119.7(4)
C(25)-C(26)-C(27);120.4(4)
C(22)-C(27)-C(26);119.6(4)
N(2)-C(28)-C(30)#2;121.2(3)
C(29)-C(28)-C(30)#2;117.8(3)
N(2)-C(28)-C(29);121.0(3)
C(28)-C(29)-C(30);120.6(3)
C(28)#2-C(30)-C(29);121.6(3)
C(16)-C(17)-H(17A);120.35
C(18)-C(17)-H(17A);120.30
C(19)-C(18)-H(18A);120.10
C(17)-C(18)-H(18A);119.99
C(18)-C(19)-H(19A);119.71
C(20)-C(19)-H(19A);119.82
C(19)-C(20)-H(20A);119.70
C(21)-C(20)-H(20A);119.80
C(20)-C(21)-H(21A);120.46
C(16)-C(21)-H(21A);120.38
C(24)-C(23)-H(23A);119.85
C(22)-C(23)-H(23A);119.85
C(23)-C(24)-H(24A);119.87
C(25)-C(24)-H(24A);119.93
C(26)-C(25)-H(25A);120.02
C(24)-C(25)-H(25A);120.23
C(27)-C(26)-H(26A);119.70
C(25)-C(26)-H(26A);119.95
C(26)-C(27)-H(27A);120.27
C(22)-C(27)-H(27A);120.12
C(30)-C(29)-H(29);119.68

C(28)-C(29)-H(29);119.74

C(29)-C(30)-H(30);119.33
C(28)#2-C(30)-H(30);119.08
O(1)-C(31)-C(32);111.8(13)
C(31)-C(32)-C(32)#3;105.4(12)
O(1)-C(31)-H(31A);109.30
O(1)-C(31)-H(31B);109.25
C(32)-C(31)-H(31A);109.33
C(32)-C(31)-H(31B);109.21
H(31A)-C(31)-H(31B);107.83
C(31)-C(32)-H(32A);110.66
C(31)-C(32)-H(32B);110.62
H(32A)-C(32)-H(32B);108.91
C(32)#3-C(32)-H(32A);110.71
C(32)#3-C(32)-H(32B);110.48

Symmetry transformations used to generate equivalent atoms:
#1 1/2-x,1/2-y-1,-z+2 #2 1/2-x,1/2-y-1,-z+1
#3 -x,y,1/2-z+1

Table 4. Anisotropic displacement parameters (A^2 x 10^3) for **1**$^{+}$SbCl$_{6}^{-}$(THF)$_{0.5}$.
The anisotropic displacement factor exponent takes the form:
-2 pi^2 [h^2 a*^2 U11 + ... + 2 h k a* b* U12]

	U11	U22	U33	U23	U13	U12
N(1)	40(2)	24(1)	40(1)	-1(1)	14(1)	0(1)
C(1)	47(2)	25(2)	36(2)	-3(1)	13(2)	7(2)
C(2)	44(2)	47(2)	49(2)	2(2)	19(2)	8(2)
C(3)	43(2)	75(3)	60(3)	-12(2)	12(2)	15(2)
C(4)	79(3)	48(3)	49(2)	0(2)	7(2)	32(2)
C(5)	87(4)	30(2)	51(3)	5(2)	9(2)	9(2)
C(6)	60(2)	30(2)	44(2)	2(2)	12(2)	-3(2)
C(7)	43(2)	24(2)	37(2)	1(1)	13(2)	-2(2)
C(8)	50(2)	28(2)	40(2)	0(1)	21(2)	1(2)
C(9)	74(3)	27(2)	37(2)	-5(2)	19(2)	-2(2)
C(10)	57(3)	42(2)	51(2)	-9(2)	10(2)	-12(2)
C(11)	46(2)	56(3)	83(3)	-18(2)	26(2)	-9(2)
C(12)	46(2)	45(2)	64(3)	-19(2)	24(2)	-4(2)
C(13)	35(2)	25(1)	36(2)	0(2)	16(1)	0(2)
C(14)	36(2)	28(2)	38(2)	-3(2)	11(2)	-4(2)
C(15)	34(2)	31(2)	34(2)	1(2)	8(2)	0(2)
N(2)	36(1)	32(1)	38(1)	1(1)	16(1)	-2(2)
C(16)	42(2)	32(2)	40(2)	2(2)	21(2)	-1(2)
C(17)	40(2)	54(2)	71(3)	8(2)	19(2)	-8(2)
C(18)	62(3)	64(3)	111(4)	2(3)	39(3)	-22(3)
C(19)	98(4)	39(2)	106(4)	6(3)	67(3)	-11(3)
C(20)	84(3)	46(2)	72(3)	25(2)	43(3)	8(2)
C(21)	50(2)	45(2)	49(2)	13(2)	17(2)	3(2)
C(22)	34(2)	31(2)	46(2)	0(2)	18(2)	0(2)
C(23)	72(3)	61(3)	46(2)	15(2)	27(2)	25(2)
C(24)	76(3)	53(3)	80(3)	25(2)	39(3)	34(2)
C(25)	83(3)	34(2)	86(3)	-4(2)	52(3)	6(2)
C(26)	117(4)	47(2)	55(3)	-11(2)	31(3)	10(3)
C(27)	90(3)	40(2)	42(2)	-2(2)	13(2)	14(2)
C(28)	32(1)	31(1)	31(1)	1(2)	10(1)	-2(2)
C(29)	43(2)	28(2)	46(2)	0(2)	20(2)	-7(2)
C(30)	46(2)	25(2)	47(2)	-6(2)	25(2)	-3(2)
Sb(1)	38(1)	30(1)	35(1)	1(1)	13(1)	-2(1)
Cl(1)	67(1)	72(1)	37(1)	-1(1)	16(1)	-26(1)
Cl(2)	56(1)	46(1)	89(1)	10(1)	28(1)	15(1)
Cl(3)	90(1)	51(1)	44(1)	-3(1)	18(1)	-4(1)
Cl(4)	55(1)	42(1)	77(1)	2(1)	33(1)	7(1)
Cl(5)	52(1)	45(1)	59(1)	2(1)	25(1)	-12(1)
Cl(6)	51(1)	41(1)	55(1)	-1(1)	17(1)	-15(1)

Table 5. Hydrogen coordinates (x 10^4) and isotropic displacement parameters (A^2 x 10^3) for **1**$^{+}$SbCl$_{6}^{-}$(THF)$_{0.5}$.

	x	y	z	U(eq)
H(2A)	3789	-3843	10369	55
H(3A)	4635	-4526	11248	74
H(4A)	4456	-5556	11913	76
H(5A)	3450	-5902	11745	73
H(6A)	2595	-5234	10892	56
H(8A)	2579	-4969	8877	46
H(9A)	1767	-5710	8034	56
H(10A)	789	-5716	8144	63
H(11A)	622	-4987	9112	73
H(12A)	1413	-4211	9930	60
H(14)	1857	-3184	8905	42
H(15)	1791	-1899	8887	41
H(17A)	500	-3054	5205	67
H(18A)	137	-4211	5467	92
H(19A)	821	-5026	6369	87
H(20A)	1863	-4712	6993	76
H(21A)	2240	-3570	6728	58
H(23A)	965	-1376	4922	70
H(24A)	668	-266	5354	80
H(25A)	971	-23	6695	74
H(26A)	1557	-903	7603	88
H(27A)	1844	-2028	7175	72
H(29)	1955	-3607	5021	45
H(30)	2685	-3608	4436	44
H(31A)	827	-3103	8224	242
H(31B)	784	-3176	7339	242
H(32A)	374	-2090	7036	300
H(32B)	599	-1950	7963	300

Table 6. Torsion angles [deg] for **1**$^{+}SbCl_6^{-}(THF)_{0.5}$.

C(31)#3-O(1)-C(31)-C(32);	-6.1(12)
C(13)-N(1)-C(1)-C(2);	-47.1(5)
C(7)-N(1)-C(1)-C(2);	132.6(3)
C(1)-N(1)-C(13)-C(15)#1;	-19.2(5)
C(13)-N(1)-C(1)-C(6);	134.0(4)
C(1)-N(1)-C(7)-C(12);	114.3(4)
C(13)-N(1)-C(7)-C(12);	-66.0(4)
C(1)-N(1)-C(13)-C(14);	160.7(4)
C(7)-N(1)-C(13)-C(14);	-19.0(5)
C(7)-N(1)-C(1)-C(6);	-46.3(4)
C(1)-N(1)-C(7)-C(8);	-62.4(4)
C(13)-N(1)-C(7)-C(8);	117.3(4)
C(7)-N(1)-C(13)-C(15)#1;	161.1(3)
C(16)-N(2)-C(22)-C(27);	64.5(5)
C(16)-N(2)-C(22)-C(23);	-117.6(4)
C(16)-N(2)-C(28)-C(30)#2;	-165.9(3)
C(16)-N(2)-C(28)-C(29);	14.4(4)
C(22)-N(2)-C(28)-C(29);	-169.7(3)
C(28)-N(2)-C(22)-C(23);	66.4(5)
C(22)-N(2)-C(16)-C(17);	69.7(4)
C(28)-N(2)-C(16)-C(21);	64.0(4)
C(22)-N(2)-C(16)-C(21);	-112.0(4)
C(22)-N(2)-C(28)-C(30)#2;	10.0(5)
C(28)-N(2)-C(16)-C(17);	-114.2(4)
C(28)-N(2)-C(22)-C(27);	-111.5(4)
C(2)-C(1)-C(6)-C(5);	0.4(5)
N(1)-C(1)-C(6)-C(5);	179.3(3)
C(6)-C(1)-C(2)-C(3);	-0.9(5)
N(1)-C(1)-C(2)-C(3);	-179.7(4)
C(1)-C(2)-C(3)-C(4);	1.0(7)
C(2)-C(3)-C(4)-C(5);	-0.8(7)
C(3)-C(4)-C(5)-C(6);	0.3(7)
C(4)-C(5)-C(6)-C(1);	-0.2(6)
N(1)-C(7)-C(8)-C(9);	177.9(3)
C(8)-C(7)-C(12)-C(11);	-0.1(5)
N(1)-C(7)-C(12)-C(11);	-176.7(3)
C(12)-C(7)-C(8)-C(9);	1.3(5)
C(7)-C(8)-C(9)-C(10);	-1.1(5)
C(8)-C(9)-C(10)-C(11);	-0.3(5)
C(9)-C(10)-C(11)-C(12);	1.6(6)
C(10)-C(11)-C(12)-C(7);	-1.4(6)
N(1)-C(13)-C(15)#1-C(14)#1;	-179.9(4)
C(14)-C(13)-C(15)#1-C(14)#1;	0.2(6)
N(1)-C(13)-C(14)-C(15);	179.9(5)
C(15)#1-C(13)-C(14)-C(15);	-0.2(6)
C(13)-C(14)-C(15)-C(13)#1;	0.2(6)
N(2)-C(16)-C(17)-C(18);	177.7(4)
C(21)-C(16)-C(17)-C(18);	-0.6(6)
C(17)-C(16)-C(21)-C(20);	0.0(6)
N(2)-C(16)-C(21)-C(20);	-178.2(4)
C(16)-C(17)-C(18)-C(19);	0.8(7)
C(17)-C(18)-C(19)-C(20);	-0.4(8)
C(18)-C(19)-C(20)-C(21);	-0.1(8)
C(19)-C(20)-C(21)-C(16);	0.3(7)
N(2)-C(22)-C(23)-C(24);	-178.4(4)
C(27)-C(22)-C(23)-C(24);	-0.5(7)
N(2)-C(22)-C(27)-C(26);	177.9(4)
C(23)-C(22)-C(27)-C(26);	0.0(7)
C(22)-C(23)-C(24)-C(25);	0.9(7)

C(23)-C(24)-C(25)-C(26);	-0.8(8)
C(24)-C(25)-C(26)-C(27);	0.2(8)
C(25)-C(26)-C(27)-C(22);	0.2(9)
N(2)-C(28)-C(29)-C(30);	-178.9(3)
N(2)-C(28)-C(30)#2-C(29)#2;	178.8(3)
C(29)-C(28)-C(30)#2-C(29)#2;	-1.4(5)
C(30)#2-C(28)-C(29)-C(30);	1.4(5)
C(28)-C(29)-C(30)-C(28)#2;	-1.5(5)
O(1)-C(31)-C(32)-C(32)#3;	15.2(15)
C(31)-C(32)-C(32)#3-C(31)#3;	-18.1(16)

Symmetry transformations used to generate equivalent atoms:
#1 1/2-x,1/2-y-1,-z+2 #2 1/2-x,1/2-y-1,-z+1
#3 -x,y,1/2-z+1