

Table 1. Crystal data and structure refinement for  $(C_5Me_4Et)_2Rh_2(C_2S_4)Cl_2$ .

Identification code	p81d
Empirical formula	$C_{24}H_{34}S_4Cl_2Rh_2$
Formula weight	727.47
Temperature	198(2) K
Wavelength	0.71073 Å
Crystal system	monoclinic
Space group	P2(1)/n
Unitcell dimensions (Å and °)	a = 8.1212(4) b = 10.4786(5) c = 15.8973(8)
Volume	1346.11(11) Å <sup>3</sup>
Z	2
Density (calculated)	1.795 g/mL
Absorption coefficient	1.747 mm <sup>-1</sup>
Crystal size	0.22 x 0.04 x 0.04 mm
Theta range for data collection	2.33° to 26.40°
Index ranges	-10 ≤ h ≤ 10 -13 ≤ k ≤ 10 -19 ≤ l ≤ 18
Independent reflections	2738 (R <sub>int</sub> = 0.0866)
Absorption correction	Psi-scan
Refinement method	full matrix least squares on F <sup>2</sup>
Data/restraints/parameters	2736/0/145
Goodness of fit on F <sup>2</sup>	1.126
Final R indices [I>2σ(I)]	R1 = 0.0530, wR2 = 0.1186
R indices (all data)	R1 = 0.0742, wR2 = 0.1341
Largest difference peak and hole	0.808, -0.914 e/Å <sup>3</sup>

Table 2. Atomic coordinates and equivalent isotropic displacement parameters ( $\text{\AA}^2$ ) for  $(\text{C}_5\text{Me}_4\text{Et})_2\text{Rh}_2(\text{C}_2\text{S}_4)\text{Cl}_2$ . U(eq) is defined as one-third the trace of the orthogonalized  $U_{ij}$  tensor.

	x	y	z	U(eq)
Rh1	0.21012(6)	0.76674(5)	0.08002(3)	0.0172(2)
C11	0.0207(2)	0.7521(2)	0.18651(11)	0.0288(4)
S1	0.2146(2)	0.9873(2)	0.08989(10)	0.0215(4)
S2	-0.0114(2)	0.79781(15)	-0.02323(11)	0.0229(4)
C1	0.0522(7)	1.0435(6)	0.0260(4)	0.0196(13)
C2	0.3140(8)	0.5755(6)	0.1122(4)	0.0198(13)
C3	0.3097(8)	0.5938(7)	0.0235(4)	0.0251(15)
C4	0.4082(8)	0.7050(6)	0.0079(4)	0.0227(14)
C5	0.4798(8)	0.7513(6)	0.0883(4)	0.0225(14)
C6	0.4198(8)	0.6754(6)	0.1540(4)	0.0210(14)
C7	0.2317(9)	0.4754(7)	0.1602(5)	0.030(2)
H7A	0.2590(9)	0.4889(7)	0.2210(5)	0.045
H7B	0.2706(9)	0.3910(7)	0.1445(5)	0.045
H7C	0.1115(9)	0.4807(7)	0.1465(5)	0.045
C8	0.2206(9)	0.5109(7)	-0.0438(5)	0.030(2)
H8A	0.2378(9)	0.5448(7)	-0.0997(5)	0.045
H8B	0.1020(9)	0.5103(7)	-0.0370(5)	0.045
H8C	0.2640(9)	0.4237(7)	-0.0385(5)	0.045
C9	0.4490(10)	0.7508(7)	-0.0765(5)	0.033(2)
H9A	0.3828(10)	0.7036(7)	-0.1212(5)	0.050
H9B	0.5669(10)	0.7368(7)	-0.0817(5)	0.050
H9C	0.4241(10)	0.8421(7)	-0.0822(5)	0.050
C10	0.5989(9)	0.8603(7)	0.1029(5)	0.032(2)
H10A	0.6281(9)	0.8716(7)	0.1638(5)	0.047
H10B	0.5474(9)	0.9386(7)	0.0790(5)	0.047
H10C	0.6992(9)	0.8419(7)	0.0755(5)	0.047
C11	0.4725(9)	0.6828(7)	0.2467(4)	0.027(2)
H11A	0.3804(9)	0.6559(7)	0.2791(4)	0.033
H11B	0.5025(9)	0.7717(7)	0.2627(4)	0.033
C12	0.6225(9)	0.5946(8)	0.2675(5)	0.033(2)
H12A	0.6580(9)	0.5988(8)	0.3282(5)	0.050
H12B	0.7135(9)	0.6221(8)	0.2356(5)	0.050
H12C	0.5916(9)	0.5067(8)	0.2519(5)	0.050

Table 3. Anisotropic displacement parameters ( $\text{\AA}^2$ ) for  $(\text{C}_5\text{Me}_4\text{Et})_2\text{Rh}_2(\text{C}_2\text{S}_4)\text{Cl}_2$ .

	U <sub>11</sub>	U <sub>22</sub>	U <sub>33</sub>	U <sub>23</sub>	U <sub>13</sub>	U <sub>12</sub>
Rh1	0.0151(3)	0.0162(3)	0.0207(3)	0.0010(2)	0.0033(2)	0.0018(2)
C11	0.0240(8)	0.0346(10)	0.0299(9)	0.0016(7)	0.0121(7)	0.0023(7)
S1	0.0196(8)	0.0172(8)	0.0270(9)	-0.0008(6)	-0.0013(6)	0.0011(6)
S2	0.0243(9)	0.0155(8)	0.0279(9)	-0.0013(6)	-0.0027(7)	0.0008(6)
C1	0.015(3)	0.026(3)	0.019(3)	0.002(3)	0.008(2)	0.002(3)
C2	0.018(3)	0.015(3)	0.026(3)	0.001(3)	0.004(3)	0.007(3)
C3	0.022(3)	0.028(4)	0.025(4)	0.000(3)	0.004(3)	0.007(3)
C4	0.020(3)	0.021(4)	0.028(4)	0.003(3)	0.007(3)	0.007(3)
C5	0.015(3)	0.024(4)	0.028(3)	0.006(3)	0.005(3)	0.006(3)
C6	0.017(3)	0.018(3)	0.028(4)	0.001(3)	0.000(3)	0.007(3)
C7	0.034(4)	0.021(4)	0.036(4)	0.005(3)	0.004(3)	-0.001(3)
C8	0.027(4)	0.025(4)	0.037(4)	-0.007(3)	0.003(3)	0.006(3)
C9	0.032(4)	0.036(4)	0.033(4)	0.005(3)	0.009(3)	0.011(3)
C10	0.024(4)	0.029(4)	0.042(5)	0.008(3)	0.005(3)	0.000(3)
C11	0.027(4)	0.035(4)	0.019(3)	0.002(3)	0.002(3)	0.002(3)
C12	0.025(4)	0.042(5)	0.032(4)	0.001(3)	-0.004(3)	0.004(3)

Table 4. Bond lengths (Å) for  $(C_5Me_4Et)_2Rh_2(C_2S_4)Cl_2$ .

Rh1 - C4	2.165(6)
Rh1 - C5	2.187(6)
Rh1 - C6	2.191(6)
Rh1 - C3	2.211(7)
Rh1 - C2	2.214(6)
Rh1 - S1	2.317(2)
Rh1 - S2	2.334(2)
Rh1 - Cl1	2.403(2)
S1 - C1	1.689(6)
S2 - C1	1.695(7)
C1 - C1	1.447(13)
C1 - S2	1.695(7)
C2 - C3	1.421(9)
C2 - C6	1.470(9)
C2 - C7	1.492(9)
C3 - C4	1.448(9)
C3 - C8	1.506(10)
C4 - C5	1.435(10)
C4 - C9	1.493(10)
C5 - C6	1.436(9)
C5 - C10	1.500(10)
C6 - C11	1.495(9)
C11 - C12	1.539(10)

Table 5. Bond angles (°) for  $(C_5Me_4Et)_2Rh_2(C_2S_4)Cl_2$ .

C4-Rh1-C5	38.5(3)
C4-Rh1-C6	64.9(2)
C5-Rh1-C6	38.3(2)
C4-Rh1-C3	38.6(2)
C5-Rh1-C3	63.8(3)
C6-Rh1-C3	64.1(2)
C4-Rh1-C2	64.3(2)
C5-Rh1-C2	64.1(2)
C6-Rh1-C2	39.0(2)
C3-Rh1-C2	37.4(2)
C4-Rh1-S1	109.1(2)
C5-Rh1-S1	93.5(2)
C6-Rh1-S1	113.2(2)
C3-Rh1-S1	147.3(2)
C2-Rh1-S1	152.1(2)
C4-Rh1-S2	103.3(2)
C5-Rh1-S2	138.6(2)
C6-Rh1-S2	160.4(2)
C3-Rh1-S2	96.7(2)
C2-Rh1-S2	122.6(2)
S1-Rh1-S2	85.08(6)
C4-Rh1-C11	156.3(2)
C5-Rh1-C11	131.3(2)
C6-Rh1-C11	96.4(2)
C3-Rh1-C11	121.3(2)
C2-Rh1-C11	92.0(2)
S1-Rh1-C11	91.30(6)
S2-Rh1-C11	90.09(6)
C1-S1-Rh1	107.5(2)

C1-S2-Rh1	106.8(2)
C1-C1-S1	120.1(7)
C1-C1-S2	120.1(6)
S1-C1-S2	119.8(4)
C3-C2-C6	107.9(6)
C3-C2-C7	129.3(6)
C6-C2-C7	122.8(6)
C3-C2-Rh1	71.2(4)
C6-C2-Rh1	69.7(3)
C7-C2-Rh1	125.1(4)
C2-C3-C4	108.7(6)
C2-C3-C8	126.1(6)
C4-C3-C8	125.2(6)
C2-C3-Rh1	71.4(4)
C4-C3-Rh1	69.0(4)
C8-C3-Rh1	126.3(5)
C5-C4-C3	107.5(6)
C5-C4-C9	125.8(6)
C3-C4-C9	126.1(6)
C5-C4-Rh1	71.6(4)
C3-C4-Rh1	72.4(4)
C9-C4-Rh1	128.6(5)
C4-C5-C6	108.9(6)
C4-C5-C10	126.4(6)
C6-C5-C10	124.7(6)
C4-C5-Rh1	69.9(4)
C6-C5-Rh1	71.0(3)
C10-C5-Rh1	125.4(5)
C5-C6-C2	106.9(6)
C5-C6-C11	127.2(6)
C2-C6-C11	125.4(6)
C5-C6-Rh1	70.7(4)
C2-C6-Rh1	71.4(3)
C11-C6-Rh1	129.6(5)
C6-C11-C12	108.9(6)

Table 1. Crystal data and structure refinement for  $\text{Cp}^*_2\text{Rh}_2(\text{C}_2\text{S}_4)$ 

Identification code	p75d
Empirical formula	$\text{C}_{22}\text{H}_{30}\text{S}_4\text{Rh}_2$
Formula weight	628.52
Temperature	198(2) K
Wavelength	0.71073 Å
Crystal system	monoclinic
Space group	P2(1)/c
Unit cell dimensions (Å and °)	a = 15.2670(2) b = 9.7171(2) c = 16.8049(3)
Volume	$\alpha = 90.00$ $\beta = 105.3960(10)$ $\gamma = 90.00$ 2403.56(7) Å <sup>3</sup>
Z	4
Density (calculated)	1.737 g/mL
Absorption coefficient	1.727 mm <sup>-1</sup>
Crystal size	0.20 x 0.16 x 0.09 mm
Theta range for data collection	1.38° to 28.29°
Index ranges	-19 ≤ h ≤ 19 -12 ≤ k ≤ 12 -22 ≤ l ≤ 13
Independent reflections	5754 ( $R_{\text{int}} = 0.0526$ )
Absorption correction	Psi-scan
Refinement method	full matrix least squares on $F^2$
Data/restraints/parameters	5754/0/253
Goodness of fit on $F^2$	0.973
Final R indices [I>2σ(I)]	$R_1 = 0.0341$ , $wR_2 = 0.0895$
R indices (all data)	$R_1 = 0.0601$ , $wR_2 = 0.0955$
Largest difference peak and hole	0.753 and -0.729 e/Å <sup>3</sup>

Table 2. Atomic coordinates and equivalent isotropic displacement parameters ( $\text{\AA}^2$ ) for  $\text{Cp}^*_2\text{Rh}_2(\text{C}_2\text{S}_4)$ . U(eq) is defined as one-third the trace of the orthogonalized  $U_{ij}$  tensor.

	x	y	z	U(eq)
Rh1	0.37269(2)	1.23843(3)	0.41202(2)	0.02175(10)
Rh2	0.11648(2)	0.77668(3)	0.11491(2)	0.02461(10)
S1	0.45616(8)	1.07314(11)	0.37445(6)	0.0277(3)
S2	0.42181(8)	1.15693(11)	0.54199(7)	0.0289(3)
S3	0.04002(8)	0.79255(11)	-0.01863(7)	0.0307(3)
S4	0.06716(8)	0.99074(11)	0.13072(7)	0.0303(3)
C1	0.5072(3)	0.9817(4)	0.4638(2)	0.0205(9)
C2	-0.0063(3)	0.9567(4)	-0.0329(2)	0.0205(8)
C3	0.3563(3)	1.4107(4)	0.3262(3)	0.0284(10)
C4	0.2886(3)	1.3104(5)	0.2932(3)	0.0310(10)
C5	0.2337(3)	1.2941(4)	0.3512(3)	0.0314(11)
C6	0.2670(3)	1.3876(4)	0.4182(3)	0.0287(10)
C7	0.3428(3)	1.4600(4)	0.4033(3)	0.0290(10)
C8	0.4271(3)	1.4626(5)	0.2865(3)	0.0478(14)
H8A	0.4652	1.5310	0.3225	0.072
H8B	0.3974	1.5049	0.2332	0.072
H8C	0.4650	1.3855	0.2778	0.072
C9	0.2775(4)	1.2383(5)	0.2125(3)	0.0465(14)
H9A	0.2262	1.1744	0.2033	0.070
H9B	0.3331	1.1872	0.2135	0.070
H9C	0.2660	1.3063	0.1678	0.070
C10	0.1535(3)	1.2037(5)	0.3408(3)	0.0439(13)
H10A	0.1451	1.1497	0.2901	0.066
H10B	0.0994	1.2601	0.3373	0.066
H10C	0.1629	1.1414	0.3882	0.066
C11	0.2282(3)	1.4106(5)	0.4898(3)	0.0423(13)
H11A	0.1766	1.3484	0.4857	0.063
H11B	0.2075	1.5062	0.4895	0.063
H11C	0.2748	1.3924	0.5413	0.063
C12	0.3938(3)	1.5747(5)	0.4541(3)	0.0413(12)
H12A	0.4426	1.6056	0.4304	0.062
H12B	0.4201	1.5425	0.5107	0.062
H12C	0.3523	1.6514	0.4547	0.062
C13	0.2409(3)	0.7380(5)	0.2116(3)	0.0448(14)
C14	0.2442(3)	0.6724(5)	0.1348(3)	0.0384(12)
C15	0.1760(3)	0.5733(5)	0.1145(3)	0.0374(12)
C16	0.1270(3)	0.5757(5)	0.1744(3)	0.0357(11)
C17	0.1659(3)	0.6762(5)	0.2354(3)	0.0364(11)
C18	0.3066(4)	0.8433(5)	0.2592(4)	0.072(2)
H18A	0.3508	0.8668	0.2283	0.108
H18B	0.3386	0.8054	0.3131	0.108
H18C	0.2733	0.9262	0.2670	0.108
C19	0.3155(4)	0.7054(7)	0.0893(4)	0.071(2)
H19A	0.3546	0.7800	0.1179	0.106
H19B	0.2854	0.7342	0.0327	0.106
H19C	0.3524	0.6234	0.0879	0.106
C20	0.1608(4)	0.4803(5)	0.0404(3)	0.0546(16)
H20A	0.1091	0.4194	0.0386	0.082
H20B	0.2154	0.4249	0.0442	0.082
H20C	0.1479	0.5361	-0.0100	0.082
C21	0.0497(3)	0.4820(5)	0.1782(3)	0.0495(14)
H21A	0.0279	0.5058	0.2263	0.074

H21B	0.0707	0.3863	0.1829	0.074
H21C	0.0001	0.4927	0.1278	0.074
C22	0.1397(4)	0.7070(6)	0.3117(3)	0.0603(17)
H22A	0.1782	0.7812	0.3416	0.090
H22B	0.1476	0.6245	0.3464	0.090
H22C	0.0760	0.7359	0.2978	0.090

Table 3. Anisotropic displacement parameters ( $\text{\AA}^2$ ) for  $\text{Cp}^*\text{Rh}_2(\text{C}_2\text{S}_4)$ .

	$U_{11}$	$U_{22}$	$U_{33}$	$U_{23}$	$U_{13}$	$U_{12}$
Rh1	0.02097(18)	0.02273(18)	0.02195(19)	0.00450(13)	0.00639(14)	0.00427(13)
Rh2	0.02533(19)	0.02331(19)	0.02395(19)	0.00528(14)	0.00435(14)	0.00584(14)
S1	0.0311(6)	0.0324(6)	0.0198(6)	0.0041(4)	0.0073(5)	0.0112(5)
S2	0.0355(6)	0.0299(6)	0.0224(6)	0.0030(4)	0.0095(5)	0.0124(5)
S3	0.0419(7)	0.0218(6)	0.0247(6)	-0.0007(4)	0.0023(5)	0.0090(5)
S4	0.0390(7)	0.0281(6)	0.0192(6)	-0.0007(4)	0.0001(5)	0.0091(5)
C1	0.016(2)	0.023(2)	0.023(2)	0.0030(16)	0.0057(17)	0.0021(16)
C2	0.018(2)	0.022(2)	0.021(2)	0.0036(16)	0.0059(17)	0.0021(16)
C3	0.029(2)	0.030(2)	0.026(2)	0.0108(19)	0.008(2)	0.0066(19)
C4	0.038(3)	0.030(2)	0.025(2)	0.0117(19)	0.008(2)	0.013(2)
C5	0.025(2)	0.030(3)	0.036(3)	0.007(2)	0.003(2)	0.0079(19)
C6	0.026(2)	0.031(2)	0.030(3)	0.0119(19)	0.010(2)	0.0134(19)
C7	0.027(2)	0.023(2)	0.036(3)	0.0083(19)	0.007(2)	0.0070(18)
C8	0.049(3)	0.045(3)	0.059(4)	0.024(3)	0.030(3)	0.007(2)
C9	0.069(4)	0.040(3)	0.026(3)	0.004(2)	0.005(3)	0.011(3)
C10	0.032(3)	0.050(3)	0.046(3)	0.013(2)	0.003(2)	-0.001(2)
C11	0.042(3)	0.047(3)	0.044(3)	0.011(2)	0.022(3)	0.020(2)
C12	0.040(3)	0.031(3)	0.050(3)	0.000(2)	0.006(2)	0.005(2)
C13	0.039(3)	0.024(3)	0.054(4)	0.007(2)	-0.019(3)	0.007(2)
C14	0.029(3)	0.042(3)	0.045(3)	0.019(2)	0.012(2)	0.014(2)
C15	0.045(3)	0.031(3)	0.035(3)	0.006(2)	0.007(2)	0.018(2)
C16	0.039(3)	0.028(3)	0.035(3)	0.014(2)	0.002(2)	0.010(2)
C17	0.043(3)	0.039(3)	0.026(3)	0.010(2)	0.008(2)	0.017(2)
C18	0.054(4)	0.045(4)	0.090(5)	0.011(3)	-0.027(3)	-0.004(3)
C19	0.048(4)	0.092(5)	0.083(5)	0.043(4)	0.034(3)	0.022(3)
C20	0.083(4)	0.036(3)	0.042(3)	-0.001(2)	0.011(3)	0.020(3)
C21	0.050(3)	0.041(3)	0.059(4)	0.015(3)	0.016(3)	0.003(2)
C22	0.080(5)	0.059(4)	0.039(3)	0.004(3)	0.010(3)	0.029(3)

**Table 4.** Bond lengths ( $\text{\AA}$ ) for  $\text{Cp}^*{}_{\text{2}}\text{Rh}_2(\text{C}_2\text{S}_4)$ .

Rh1 - C5	2.165(4)
Rh1 - C3	2.180(4)
Rh1 - C4	2.182(4)
Rh1 - C6	2.192(4)
Rh1 - C7	2.198(4)
Rh1 - S1	2.2425(11)
Rh1 - S2	2.2563(11)
Rh2 - C14	2.143(4)
Rh2 - C15	2.176(4)
Rh2 - C13	2.179(5)
Rh2 - C16	2.180(4)
Rh2 - C17	2.193(4)
Rh2 - S3	2.2431(11)
Rh2 - S4	2.2517(11)
S1 - C1	1.740(4)
S2 - C1	1.748(4)
S3 - C2	1.736(4)
S4 - C2	1.737(4)
C1 - C1	1.342(8)
C1 - S2	1.748(4)
C2 - C2	1.362(8)
C2 - S4	1.737(4)
C3 - C4	1.421(6)
C3 - C7	1.447(6)
C3 - C8	1.501(6)
C4 - C5	1.452(6)
C4 - C9	1.496(6)
C5 - C6	1.432(6)
C5 - C10	1.479(6)
C6 - C7	1.432(6)
C6 - C11	1.493(6)
C7 - C12	1.491(6)
C13 - C17	1.440(7)
C13 - C14	1.453(7)
C13 - C18	1.506(7)
C14 - C15	1.392(7)
C14 - C19	1.522(7)
C15 - C16	1.405(7)
C15 - C20	1.507(6)
C16 - C17	1.427(7)
C16 - C21	1.506(6)
C17 - C22	1.471(7)

**Table 5.** Bond angles ( $^\circ$ ) for  $\text{Cp}^*{}_{\text{2}}\text{Rh}_2(\text{C}_2\text{S}_4)$ .

C5-Rh1-C3	64.51(16)
C5-Rh1-C4	39.03(17)
C3-Rh1-C4	38.01(16)
C5-Rh1-C6	38.36(16)
C3-Rh1-C6	64.32(15)
C4-Rh1-C6	64.51(16)
C5-Rh1-C7	64.15(16)
C3-Rh1-C7	38.60(16)
C4-Rh1-C7	64.14(16)
C6-Rh1-C7	38.08(15)

C5-Rh1-S1	127.21(13)
C3-Rh1-S1	109.74(12)
C4-Rh1-S1	102.26(12)
C6-Rh1-S1	165.34(12)
C7-Rh1-S1	143.74(12)
C5-Rh1-S2	125.24(13)
C3-Rh1-S2	149.35(13)
C4-Rh1-S2	164.11(13)
C6-Rh1-S2	104.24(11)
C7-Rh1-S2	114.70(12)
S1-Rh1-S2	87.33(4)
C14-Rh2-C15	37.60(18)
C14-Rh2-C13	39.27(19)
C15-Rh2-C13	64.13(18)
C14-Rh2-C16	63.39(18)
C15-Rh2-C16	37.63(18)
C13-Rh2-C16	63.91(18)
C14-Rh2-C17	64.55(17)
C15-Rh2-C17	63.72(17)
C13-Rh2-C17	38.45(19)
C16-Rh2-C17	38.08(17)
C14-Rh2-S3	113.49(14)
C15-Rh2-S3	99.56(13)
C13-Rh2-S3	151.26(17)
C16-Rh2-S3	118.40(13)
C17-Rh2-S3	156.10(14)
C14-Rh2-S4	137.49(14)
C15-Rh2-S4	172.91(13)
C13-Rh2-S4	108.89(13)
C16-Rh2-S4	139.42(14)
C17-Rh2-S4	110.24(13)
S3-Rh2-S4	87.31(4)
C1-S1-Rh1	106.30(13)
C1-S2-Rh1	105.58(13)
C2-S3-Rh2	106.62(14)
C2-S4-Rh2	105.76(13)
C1-C1-S1	120.3(4)
C1-C1-S2	120.5(4)
S1-C1-S2	119.2(2)
C2-C2-S3	119.4(4)
C2-C2-S4	120.8(4)
S3-C2-S4	119.8(2)
C4-C3-C7	108.4(4)
C4-C3-C8	126.3(4)
C7-C3-C8	125.3(4)
C4-C3-Rh1	71.1(2)
C7-C3-Rh1	71.3(2)
C8-C3-Rh1	125.6(3)
C3-C4-C5	107.6(4)
C3-C4-C9	124.8(4)
C5-C4-C9	127.6(4)
C3-C4-Rh1	70.9(2)
C5-C4-Rh1	69.8(2)
C9-C4-Rh1	125.2(3)
C6-C5-C4	108.1(4)
C6-C5-C10	125.4(4)

C4-C5-C10	126.4(4)
C6-C5-Rh1	71.8(2)
C4-C5-Rh1	71.1(2)
C10-C5-Rh1	125.7(3)
C5-C6-C7	108.0(4)
C5-C6-C11	126.5(4)
C7-C6-C11	125.4(4)
C5-C6-Rh1	69.8(2)
C7-C6-Rh1	71.2(2)
C11-C6-Rh1	126.3(3)
C6-C7-C3	107.9(4)
C6-C7-C12	126.2(4)
C3-C7-C12	125.7(4)
C6-C7-Rh1	70.7(2)
C3-C7-Rh1	70.1(2)
C12-C7-Rh1	128.8(3)
C17-C13-C14	106.4(4)
C17-C13-C18	127.1(6)
C14-C13-C18	126.4(6)
C17-C13-Rh2	71.3(3)
C14-C13-Rh2	69.0(3)
C18-C13-Rh2	127.2(3)
C15-C14-C13	108.7(4)
C15-C14-C19	127.7(5)
C13-C14-C19	123.5(5)
C15-C14-Rh2	72.5(3)
C13-C14-Rh2	71.7(3)
C19-C14-Rh2	124.4(3)
C14-C15-C16	108.6(4)
C14-C15-C20	124.0(5)
C16-C15-C20	127.4(5)
C14-C15-Rh2	69.9(3)
C16-C15-Rh2	71.3(2)
C20-C15-Rh2	125.1(3)
C15-C16-C17	109.1(4)
C15-C16-C21	126.4(5)
C17-C16-C21	124.4(5)
C15-C16-Rh2	71.0(2)
C17-C16-Rh2	71.5(3)
C21-C16-Rh2	126.8(3)
C16-C17-C13	107.2(4)
C16-C17-C22	127.5(5)
C13-C17-C22	125.2(5)
C16-C17-Rh2	70.4(3)
C13-C17-Rh2	70.2(3)
C22-C17-Rh2	127.4(3)

