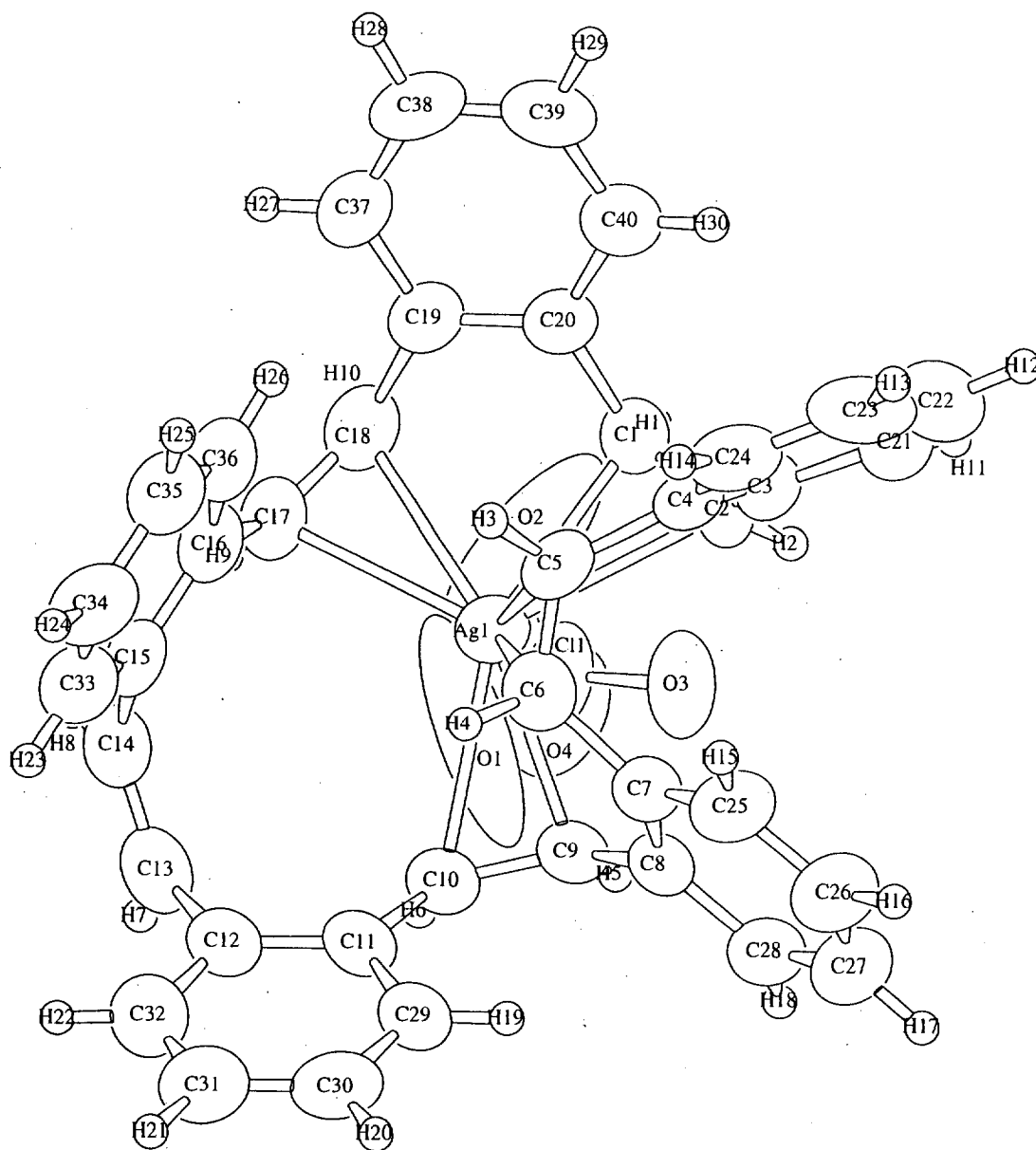
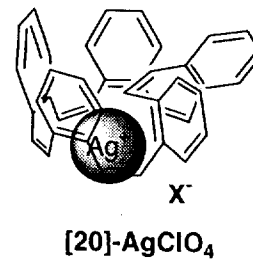


Table 5. Bond Angles(°) (continued)

atom	atom	atom	angle	atom	atom	atom	angle
C(21)	C(22)	C(23)	121(1)	C(22)	C(23)	C(24)	118(1)
C(8)	C(24)	C(23)	120(1)	C(11)	C(25)	C(26)	120(1)
C(25)	C(26)	C(27)	119(1)	C(26)	C(27)	C(28)	120(1)
C(12)	C(28)	C(27)	122(1)	C(15)	C(29)	C(30)	121(1)
C(29)	C(30)	C(31)	119(1)	C(30)	C(31)	C(32)	118(1)
C(16)	C(32)	C(31)	123(1)				

X-ray crystallographic data for 7



Experimental

Data Collection

A colorless prismatic crystal of $C_{40}H_{30}AgClO_4$ having approximate dimensions of 0.40 x 0.40 x 0.20 mm was mounted on a glass fiber. All measurements were made on a Rigaku AFC7R diffractometer with graphite monochromated Mo-K α radiation and a rotating anode generator.

Cell constants and an orientation matrix for data collection, obtained from a least-squares refinement using the setting angles of 25 carefully centered reflections in the range $28.63 < 2\theta < 29.95^\circ$ corresponded to a primitive monoclinic cell with dimensions:

$$\begin{aligned} a &= 16.537(4) \text{ \AA} \\ b &= 12.306(4) \text{ \AA} \quad \beta = 105.73(2)^\circ \\ c &= 16.633(5) \text{ \AA} \\ V &= 3258(1) \text{ \AA}^3 \end{aligned}$$

For $Z = 4$ and F.W. = 718.00, the calculated density is 1.46 g/cm³. The systematic absences of:

$$h0l: h \neq 2n$$

$$0k0: k \neq 2n$$

uniquely determine the space group to be:

$$P2_1/a \text{ (#14)}$$

The data were collected at a temperature of $23 \pm 1^\circ\text{C}$ using the ω - 2θ scan technique to a maximum 2θ value of 55.0° . Omega scans of several intense reflections, made prior to data collection, had an average width at half-height of 0.23° with a take-off angle of 6.0° . Scans of $(1.05 + 0.30 \tan \theta)^\circ$ were made at a speed of $16.0^\circ/\text{min}$ (in omega). The weak reflections ($I < 10.0\sigma(I)$) were rescanned (maximum of 5 scans) and the counts were accumulated to ensure good counting statistics. Stationary background counts were recorded on each side of the reflection. The ratio of peak counting time to background counting time was 2:1. The diameter of the incident beam collimator was 0.5 mm and the crystal to detector distance was 235 mm. The computer-controlled slits were set to 3.0 mm (horizontal) and 3.0 mm (vertical).

Data Reduction

Of the 8094 reflections which were collected, 7694 were unique ($R_{int} = 0.030$). The intensities of three representative reflection were measured after every 150 reflections. No decay correction was applied.

The linear absorption coefficient, μ , for Mo-K α radiation is 7.4 cm^{-1} . Azimuthal scans of several reflections indicated no need for an absorption correction. A correction for secondary extinction was applied (coefficient = $2.43310\text{e-}07$).

Structure Solution and Refinement

The structure was solved by direct methods¹ and expanded using Fourier techniques². The non-hydrogen atoms were refined anisotropically. Hydrogen atoms were included but not refined. The final cycle of full-matrix least-squares refinement³ was based on 3464 observed reflections ($I > 3.00\sigma(I)$) and 416 variable parameters and converged (largest parameter shift was 0.15 times its esd) with unweighted and weighted agreement factors of:

$$R = \Sigma||Fo| - |Fc||/\Sigma|Fo| = 0.053$$

$$R_w = \sqrt{\Sigma w(|Fo| - |Fc|)^2 / \Sigma w Fo^2} = 0.057$$

$$R1 = \Sigma||Fo| - |Fc||/\Sigma|Fo| = 0.053 \quad \text{for } I > 3.0\sigma(I) \text{ data}$$

The standard deviation of an observation of unit weight⁴ was 1.95. The weighting scheme was based on counting statistics and included a factor ($p = 0.020$) to downweight the intense reflections. Plots of $\Sigma w(|Fo| - |Fc|)^2$ versus $|Fo|$, reflection order in data collection, $\sin \theta/\lambda$ and various classes of indices showed no unusual trends. The maximum and minimum peaks on the final difference Fourier map corresponded to 0.92 and $-0.97 \text{ e}^-/\text{\AA}^3$, respectively.

Neutral atom scattering factors were taken from Cromer and Waber⁵. Anomalous dispersion effects were included in Fcalc⁶; the values for $\Delta f'$ and $\Delta f''$ were those of Creagh and McAuley⁷. The values for the mass attenuation coefficients are those of Creagh and Hubbel⁸. All calculations were performed using the teXsan⁹ crystallographic software package of Molecular Structure Corporation.

References

(1) SIR92: Altomare, A., Burla, M.C., Camalli, M., Cascarano, M., Giacovazzo, C., Guagliardi, A., Polidori, G., (1994). *J. Appl. Cryst.* 27, 435.

(2) DIRDIF94: Beurskens, P.T., Admiraal, G., Beurskens, G., Bosman, W.P., de Gelder, R., Israel, R. and Smits, J.M.M. (1994). The DIRDIF-94 program system, Technical Report of the Crystallography Laboratory, University of Nijmegen, The Netherlands.

(3) Least-Squares:

$$\text{Function minimized: } \Sigma w(|Fo| - |Fc|)^2$$

$$\text{where } w = \frac{1}{\sigma^2(Fo)} = [\sigma_c^2(Fo) + \frac{p}{4} Fo^2]^{-1}$$

$$\sigma_c(Fo) = \text{e.s.d. based on counting statistics}$$

$$p = \text{p-factor}$$

(4) Standard deviation of an observation of unit weight:

$$\sqrt{\Sigma w(|Fo| - |Fc|)^2 / (No - Nv)}$$

where: No = number of observations

Nv = number of variables

(5) Cromer, D. T. & Waber, J. T.; "International Tables for X-ray Crystallography", Vol. IV, The Kynoch Press, Birmingham, England, Table 2.2 A (1974).

(6) Ibers, J. A. & Hamilton, W. C.; *Acta Crystallogr.*, 17, 781 (1964).

(7) Creagh, D. C. & McAuley, W.J. ; "International Tables for Crystallography", Vol C, (A.J.C. Wilson, ed.), Kluwer Academic Publishers, Boston, Table 4.2.6.8, pages 219-222 (1992).

(8) Creagh, D. C. & Hubbell, J.H.; "International Tables for Crystallography", Vol C, (A.J.C. Wilson, ed.), Kluwer Academic Publishers, Boston, Table 4.2.4.3, pages 200-206 (1992).

(9) teXsan: Crystal Structure Analysis Package, Molecular Structure Corporation (1985 & 1999).

EXPERIMENTAL DETAILS

A. Crystal Data

Empirical Formula	$C_{40}H_{30}AgClO_4$
Formula Weight	718.00
Crystal Color, Habit	colorless, prismatic
Crystal Dimensions	0.40 X 0.40 X 0.20 mm
Crystal System	monoclinic
Lattice Type	Primitive
No. of Reflections Used for Unit Cell Determination (2θ range)	25 (28.6 - 30.0°)
Omega Scan Peak Width at Half-height	0.23°
Lattice Parameters	$a = 16.537(4) \text{ \AA}$ $b = 12.306(4) \text{ \AA}$ $c = 16.633(5) \text{ \AA}$ $\beta = 105.73(2)^\circ$ $V = 3258(1) \text{ \AA}^3$
Space Group	$P2_1/a$ (#14)
Z value	4
D_{calc}	1.464 g/cm ³
F_{000}	1464.00
$\mu(\text{MoK}\alpha)$	7.40 cm ⁻¹

B. Intensity Measurements

Diffractometer	Rigaku AFC7R (rotating anode)
Radiation	MoK α ($\lambda = 0.71069 \text{ \AA}$) graphite monochromated
Attenuator	Zr foil (factor = 8.53)

Temperature	23.0 °C
Voltage, Current	50 kV, 200 mA
Collimator Size	0.5 mm
Take-off Angle	6.0°
Detector Aperture	3.0 mm horizontal 3.0 mm vertical
Crystal to Detector Distance	235 mm
Scan Type	ω - 2θ
Scan Rate	16.0°/min (in ω) (up to 5 scans)
Scan Width	$(1.05 + 0.30 \tan \theta)^\circ$
$2\theta_{max}$	55.0°
No. of Reflections Measured	Total: 8094 Unique: 7694 ($R_{int} = 0.030$)
Corrections	Lorentz-polarization Secondary Extinction (coefficient: 2.43310e-07)

C. Structure Solution and Refinement

Structure Solution	Direct Methods (SIR92)
Refinement	Full-matrix least-squares
Function Minimized	$\Sigma w(F_o - F_c)^2$
Least Squares Weights	$w = \frac{1}{\sigma^2(F_o)} = [\sigma_c^2(F_o) + \frac{p^2}{4} F_o^2]^{-1}$
p-factor	0.0200
Anomalous Dispersion	All non-hydrogen atoms
No. Observations ($I > 3.00\sigma(I)$)	3464
No. Variables	416
Reflection/Parameter Ratio	8.33
Residuals: R; Rw	0.053 ; 0.057
Residuals: R1	0.053

No. of Reflections to calc R1	3464
Goodness of Fit Indicator	1.95
Max Shift/Error in Final Cycle	0.148
Maximum peak in Final Diff. Map	$0.92 e^{-}/\text{\AA}^3$
Minimum peak in Final Diff. Map	$-0.97 e^{-}/\text{\AA}^3$

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

atom	x	y	z	B_{eq}
Ag(1)	0.28477(4)	0.08655(5)	0.74952(4)	4.80(1)
Cl(1)	0.3228(1)	0.3682(2)	0.8006(1)	5.86(5)
O(1)	0.3056(9)	0.3208(9)	0.7276(5)	23.0(5)
O(2)	0.2522(6)	0.3516(8)	0.827(1)	22.8(5)
O(3)	0.3895(4)	0.3112(5)	0.8554(3)	7.1(2)
O(4)	0.3311(4)	0.4759(5)	0.7984(5)	10.0(2)
C(1)	0.2739(4)	0.0844(6)	0.8954(4)	4.2(2)
C(2)	0.3507(5)	0.0390(6)	0.9125(4)	4.3(2)
C(3)	0.3684(4)	-0.0770(6)	0.9304(4)	4.4(2)
C(4)	0.3392(4)	-0.1599(6)	0.8734(5)	4.0(2)
C(5)	0.3006(4)	-0.1394(6)	0.7827(5)	4.3(2)
C(6)	0.3435(5)	-0.1073(5)	0.7296(4)	4.3(2)
C(7)	0.4362(4)	-0.0882(6)	0.7535(4)	4.0(2)
C(8)	0.4698(5)	0.0128(6)	0.7451(4)	4.0(2)
C(9)	0.4166(4)	0.1083(5)	0.7128(4)	4.1(2)
C(10)	0.3647(4)	0.1235(5)	0.6345(4)	4.1(2)
C(11)	0.3533(5)	0.0527(6)	0.5597(4)	4.1(2)
C(12)	0.2857(5)	0.0708(7)	0.4898(5)	5.0(2)
C(13)	0.2184(6)	0.1512(7)	0.4891(5)	5.6(2)
C(14)	0.1480(5)	0.1294(7)	0.5108(5)	5.4(2)
C(15)	0.1251(4)	0.0240(7)	0.5413(5)	4.7(2)
C(16)	0.1140(4)	0.0142(6)	0.6229(5)	4.4(2)
C(17)	0.1296(4)	0.1117(5)	0.6762(5)	4.5(2)
C(18)	0.1349(5)	0.1275(6)	0.7577(5)	4.9(2)

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

atom	x	y	z	B_{eq}
C(19)	0.1249(4)	0.0519(5)	0.8227(5)	4.1(2)
C(20)	0.1935(4)	0.0269(5)	0.8900(4)	3.9(2)
C(21)	0.4138(5)	-0.1038(7)	1.0112(5)	5.7(2)
C(22)	0.4233(6)	-0.2101(9)	1.0360(6)	7.1(3)
C(23)	0.3933(6)	-0.2908(7)	0.9829(7)	6.7(3)
C(24)	0.3497(5)	-0.2666(6)	0.9011(5)	5.5(2)
C(25)	0.4897(5)	-0.1751(6)	0.7832(5)	5.3(2)
C(26)	0.5753(5)	-0.1601(7)	0.8074(6)	6.2(3)
C(27)	0.6095(5)	-0.0613(8)	0.8008(5)	6.3(2)
C(28)	0.5572(5)	0.0255(7)	0.7707(5)	5.0(2)
C(29)	0.4145(5)	-0.0225(7)	0.5540(4)	5.1(2)
C(30)	0.4081(5)	-0.0790(7)	0.4806(5)	5.7(2)
C(31)	0.3419(6)	-0.0613(8)	0.4120(6)	6.9(3)
C(32)	0.2823(6)	0.0143(8)	0.4166(5)	6.9(3)
C(33)	0.1129(5)	-0.0684(8)	0.4910(5)	6.1(2)
C(34)	0.0914(5)	-0.1666(7)	0.5172(6)	6.1(2)
C(35)	0.0808(5)	-0.1758(7)	0.5960(5)	5.5(2)
C(36)	0.0907(4)	-0.0868(7)	0.6477(5)	5.0(2)
C(37)	0.0458(5)	0.0077(7)	0.8203(5)	5.2(2)
C(38)	0.0367(5)	-0.0588(7)	0.8838(6)	6.2(3)
C(39)	0.1053(6)	-0.0864(7)	0.9480(5)	5.7(2)
C(40)	0.1839(5)	-0.0445(6)	0.9521(5)	5.1(2)
H(1)	0.2750	0.1553	0.9182	5.0292
H(2)	0.3949	0.0860	0.9405	5.1815

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

atom	x	y	z	B_{eq}
H(3)	0.2516	-0.1809	0.7583	5.1380
H(4)	0.3222	-0.1357	0.6748	5.2004
H(5)	0.4440	0.1740	0.7348	4.9163
H(6)	0.3617	0.1981	0.6193	4.9621
H(7)	0.2260	0.2233	0.4721	6.7608
H(8)	0.1088	0.1872	0.5061	6.4724
H(9)	0.1188	0.1771	0.6448	5.4438
H(10)	0.1273	0.2013	0.7707	5.8224
H(11)	0.4385	-0.0479	1.0493	6.8947
H(12)	0.4517	-0.2267	1.0924	8.5060
H(13)	0.4017	-0.3642	1.0008	7.9900
H(14)	0.3267	-0.3239	0.8636	6.5917
H(15)	0.4670	-0.2453	0.7867	6.3676
H(16)	0.6111	-0.2198	0.8290	7.4503
H(17)	0.6687	-0.0520	0.8168	7.5054
H(18)	0.5809	0.0951	0.7672	5.9843
H(19)	0.4611	-0.0351	0.6009	6.0745
H(20)	0.4501	-0.1304	0.4779	6.8040
H(21)	0.3372	-0.1008	0.3619	8.2356
H(22)	0.2375	0.0285	0.3683	8.2744
H(23)	0.1199	-0.0627	0.4363	7.2732
H(24)	0.0839	-0.2279	0.4813	7.2703
H(25)	0.0666	-0.2442	0.6149	6.5485
H(26)	0.0815	-0.0941	0.7014	5.9778

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

atom	x	y	z	B_{eq}
H(27)	-0.0014	0.0237	0.7747	6.2782
H(28)	-0.0173	-0.0856	0.8833	7.4388
H(29)	0.0987	-0.1350	0.9901	6.8726
H(30)	0.2309	-0.0641	0.9968	6.1756

$$B_{eq} = \frac{8}{3}\pi^2(U_{11}(aa^*)^2 + U_{22}(bb^*)^2 + U_{33}(cc^*)^2 + 2U_{12}aa^*bb^* \cos \gamma + 2U_{13}aa^*cc^* \cos \beta + 2U_{23}bb^*cc^* \cos \alpha)$$

Table 2. Anisotropic Displacement Parameters

atom	U ₁₁	U ₂₂	U ₃₃	U ₁₂	U ₁₃	U ₂₃
Ag(1)	0.0556(4)	0.0648(4)	0.0642(4)	0.0040(3)	0.0203(3)	0.0050(3)
Cl(1)	0.070(1)	0.047(1)	0.084(2)	0.003(1)	-0.016(1)	-0.007(1)
O(1)	0.48(2)	0.22(1)	0.078(6)	0.26(1)	-0.085(8)	-0.065(6)
O(2)	0.079(6)	0.139(8)	0.60(3)	-0.010(6)	0.01(1)	0.16(1)
O(3)	0.081(4)	0.088(4)	0.081(4)	0.029(4)	-0.013(3)	0.013(3)
O(4)	0.117(6)	0.047(4)	0.190(7)	-0.011(4)	-0.003(5)	0.000(4)
C(1)	0.056(4)	0.048(4)	0.053(4)	-0.004(4)	0.011(3)	-0.006(4)
C(2)	0.052(5)	0.060(5)	0.044(4)	-0.007(4)	0.001(3)	0.002(4)
C(3)	0.041(4)	0.066(5)	0.060(5)	0.002(4)	0.010(3)	0.020(4)
C(4)	0.039(4)	0.055(5)	0.060(5)	0.005(3)	0.021(3)	0.014(4)
C(5)	0.043(4)	0.047(4)	0.072(5)	-0.011(3)	0.014(4)	-0.001(4)
C(6)	0.069(5)	0.034(4)	0.060(5)	-0.001(3)	0.013(4)	-0.012(3)
C(7)	0.053(4)	0.053(4)	0.050(4)	0.001(4)	0.017(3)	-0.002(4)
C(8)	0.055(5)	0.057(5)	0.040(4)	0.002(4)	0.016(3)	-0.001(4)
C(9)	0.059(4)	0.050(5)	0.049(4)	-0.015(4)	0.019(4)	-0.001(3)
C(10)	0.061(5)	0.045(4)	0.054(5)	-0.007(3)	0.020(4)	0.004(3)
C(11)	0.064(5)	0.050(4)	0.047(4)	0.000(4)	0.022(4)	0.004(3)
C(12)	0.065(5)	0.074(6)	0.053(5)	-0.013(4)	0.020(4)	0.004(4)
C(13)	0.085(7)	0.069(6)	0.053(5)	0.000(5)	0.007(5)	0.006(4)
C(14)	0.062(6)	0.079(6)	0.058(5)	0.015(5)	0.006(4)	0.007(4)
C(15)	0.040(4)	0.070(6)	0.063(5)	0.002(4)	0.002(4)	-0.005(4)
C(16)	0.045(4)	0.053(5)	0.064(5)	0.006(4)	0.004(4)	-0.002(4)
C(17)	0.053(5)	0.047(5)	0.065(5)	0.009(3)	0.004(4)	0.007(4)
C(18)	0.057(5)	0.047(4)	0.077(6)	0.010(4)	0.012(4)	-0.001(4)

Table 2. Anisotropic Displacement Parameters (continued)

atom	U ₁₁	U ₂₂	U ₃₃	U ₁₂	U ₁₃	U ₂₃
C(19)	0.052(5)	0.041(4)	0.067(5)	0.002(3)	0.020(4)	-0.008(4)
C(20)	0.053(5)	0.041(4)	0.058(5)	0.003(3)	0.023(4)	-0.008(4)
C(21)	0.056(5)	0.090(7)	0.072(6)	0.008(5)	0.016(4)	0.017(5)
C(22)	0.090(7)	0.098(8)	0.090(7)	0.043(6)	0.041(6)	0.045(6)
C(23)	0.095(7)	0.063(6)	0.119(9)	0.033(5)	0.070(7)	0.047(6)
C(24)	0.064(5)	0.061(5)	0.097(6)	0.011(4)	0.044(5)	0.018(5)
C(25)	0.062(5)	0.059(5)	0.087(6)	0.006(4)	0.030(5)	0.012(4)
C(26)	0.062(6)	0.081(7)	0.097(7)	0.028(5)	0.029(5)	0.021(5)
C(27)	0.055(5)	0.099(7)	0.086(6)	0.017(5)	0.024(5)	0.014(6)
C(28)	0.060(5)	0.071(6)	0.062(5)	-0.007(4)	0.024(4)	0.001(4)
C(29)	0.064(5)	0.081(6)	0.050(5)	-0.003(5)	0.020(4)	0.001(4)
C(30)	0.072(6)	0.075(6)	0.080(6)	-0.019(5)	0.040(5)	-0.025(5)
C(31)	0.079(7)	0.115(8)	0.073(6)	-0.028(6)	0.032(5)	-0.045(6)
C(32)	0.075(6)	0.125(8)	0.061(6)	-0.017(6)	0.015(5)	-0.028(6)
C(33)	0.059(5)	0.096(7)	0.075(6)	0.001(5)	0.018(4)	-0.015(6)
C(34)	0.066(6)	0.069(6)	0.098(7)	-0.012(5)	0.027(5)	-0.030(5)
C(35)	0.062(5)	0.067(6)	0.075(6)	-0.014(4)	0.014(5)	-0.016(5)
C(36)	0.055(5)	0.064(5)	0.063(5)	0.001(4)	0.004(4)	-0.006(5)
C(37)	0.053(5)	0.073(6)	0.072(6)	-0.003(4)	0.015(4)	-0.013(4)
C(38)	0.064(6)	0.083(7)	0.099(7)	-0.026(5)	0.042(5)	-0.025(6)
C(39)	0.091(7)	0.063(5)	0.076(6)	-0.008(5)	0.046(5)	0.005(5)
C(40)	0.069(6)	0.061(5)	0.070(5)	0.001(4)	0.026(4)	0.007(4)

The general temperature factor expression:

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

Table 3. Bond Lengths(Å)

atom	atom	distance	atom	atom	distance
Ag(1)	O(1)	2.94(1)	Ag(1)	C(1)	2.481(7)
Ag(1)	C(2)	2.698(7)	Ag(1)	C(5)	2.833(7)
Ag(1)	C(6)	2.630(6)	Ag(1)	C(9)	2.433(7)
Ag(1)	C(10)	2.643(7)	Ag(1)	C(17)	2.543(7)
Ag(1)	C(18)	2.568(7)	Cl(1)	O(1)	1.306(7)
Cl(1)	O(2)	1.37(1)	Cl(1)	O(3)	1.412(5)
Cl(1)	O(4)	1.334(6)	C(1)	C(2)	1.346(9)
C(1)	C(20)	1.487(9)	C(2)	C(3)	1.471(10)
C(3)	C(4)	1.387(10)	C(3)	C(21)	1.390(10)
C(4)	C(5)	1.492(10)	C(4)	C(24)	1.386(10)
C(5)	C(6)	1.334(9)	C(6)	C(7)	1.494(9)
C(7)	C(8)	1.384(9)	C(7)	C(25)	1.391(10)
C(8)	C(9)	1.478(9)	C(8)	C(28)	1.401(10)
C(9)	C(10)	1.366(9)	C(10)	C(11)	1.488(9)
C(11)	C(12)	1.396(10)	C(11)	C(29)	1.393(10)
C(12)	C(13)	1.49(1)	C(12)	C(32)	1.39(1)
C(13)	C(14)	1.34(1)	C(14)	C(15)	1.48(1)
C(15)	C(16)	1.423(10)	C(15)	C(33)	1.39(1)
C(16)	C(17)	1.472(9)	C(16)	C(36)	1.396(10)
C(17)	C(18)	1.348(10)	C(18)	C(19)	1.469(10)
C(19)	C(20)	1.396(9)	C(19)	C(37)	1.406(10)
C(20)	C(40)	1.398(9)	C(21)	C(22)	1.37(1)
C(22)	C(23)	1.33(1)	C(23)	C(24)	1.39(1)
C(25)	C(26)	1.37(1)	C(26)	C(27)	1.36(1)

Table 3. Bond Lengths(\AA) (continued)

atom	atom	distance	atom	atom	distance
C(27)	C(28)	1.38(1)	C(29)	C(30)	1.383(10)
C(30)	C(31)	1.37(1)	C(31)	C(32)	1.37(1)
C(33)	C(34)	1.36(1)	C(34)	C(35)	1.37(1)
C(35)	C(36)	1.375(10)	C(37)	C(38)	1.38(1)
C(38)	C(39)	1.37(1)	C(39)	C(40)	1.38(1)

Table 5. Bond Angles(°)

atom	atom	atom	angle	atom	atom	atom	angle
O(1)	Ag(1)	C(1)	100.0(2)	O(1)	Ag(1)	C(2)	108.0(2)
O(1)	Ag(1)	C(5)	168.4(3)	O(1)	Ag(1)	C(6)	144.6(3)
O(1)	Ag(1)	C(9)	73.6(3)	O(1)	Ag(1)	C(10)	69.1(3)
O(1)	Ag(1)	C(17)	87.6(3)	O(1)	Ag(1)	C(18)	87.8(3)
C(1)	Ag(1)	C(2)	29.8(2)	C(1)	Ag(1)	C(5)	80.0(2)
C(1)	Ag(1)	C(6)	103.9(2)	C(1)	Ag(1)	C(9)	123.6(2)
C(1)	Ag(1)	C(10)	153.2(2)	C(1)	Ag(1)	C(17)	98.0(2)
C(1)	Ag(1)	C(18)	67.9(2)	C(2)	Ag(1)	C(5)	66.5(2)
C(2)	Ag(1)	C(6)	82.4(2)	C(2)	Ag(1)	C(9)	97.5(2)
C(2)	Ag(1)	C(10)	128.3(2)	C(2)	Ag(1)	C(17)	126.1(2)
C(2)	Ag(1)	C(18)	97.0(2)	C(5)	Ag(1)	C(6)	28.0(2)
C(5)	Ag(1)	C(9)	96.6(2)	C(5)	Ag(1)	C(10)	105.8(2)
C(5)	Ag(1)	C(17)	103.9(2)	C(5)	Ag(1)	C(18)	102.8(2)
C(6)	Ag(1)	C(9)	71.4(2)	C(6)	Ag(1)	C(10)	77.9(2)
C(6)	Ag(1)	C(17)	114.1(2)	C(6)	Ag(1)	C(18)	125.4(2)
C(9)	Ag(1)	C(10)	30.9(2)	C(9)	Ag(1)	C(17)	136.3(2)
C(9)	Ag(1)	C(18)	159.2(2)	C(10)	Ag(1)	C(17)	105.6(2)
C(10)	Ag(1)	C(18)	133.1(2)	C(17)	Ag(1)	C(18)	30.6(2)
O(1)	Cl(1)	O(2)	104.0(9)	O(1)	Cl(1)	O(3)	108.3(5)
O(1)	Cl(1)	O(4)	114.6(7)	O(2)	Cl(1)	O(3)	107.7(5)
O(2)	Cl(1)	O(4)	105.0(6)	O(3)	Cl(1)	O(4)	116.3(4)
Ag(1)	O(1)	Cl(1)	109.0(6)	Ag(1)	C(1)	C(2)	84.1(4)
Ag(1)	C(1)	C(20)	104.3(4)	C(2)	C(1)	C(20)	126.3(7)
Ag(1)	C(2)	C(1)	66.1(4)	Ag(1)	C(2)	C(3)	114.7(5)

Table 5. Bond Angles(°) (continued)

atom	atom	atom	angle	atom	atom	atom	angle
C(1)	C(2)	C(3)	124.8(7)	C(2)	C(3)	C(4)	124.2(6)
C(2)	C(3)	C(21)	116.8(7)	C(4)	C(3)	C(21)	118.9(7)
C(3)	C(4)	C(5)	122.8(6)	C(3)	C(4)	C(24)	118.7(7)
C(5)	C(4)	C(24)	118.5(7)	Ag(1)	C(5)	C(4)	110.8(4)
Ag(1)	C(5)	C(6)	67.5(4)	C(4)	C(5)	C(6)	124.1(6)
Ag(1)	C(6)	C(5)	84.5(5)	Ag(1)	C(6)	C(7)	102.2(4)
C(5)	C(6)	C(7)	124.1(7)	C(6)	C(7)	C(8)	121.7(6)
C(6)	C(7)	C(25)	118.8(7)	C(8)	C(7)	C(25)	119.4(7)
C(7)	C(8)	C(9)	122.3(7)	C(7)	C(8)	C(28)	118.7(7)
C(9)	C(8)	C(28)	119.0(7)	Ag(1)	C(9)	C(8)	107.9(4)
Ag(1)	C(9)	C(10)	83.1(4)	C(8)	C(9)	C(10)	127.8(6)
Ag(1)	C(10)	C(9)	66.1(4)	Ag(1)	C(10)	C(11)	122.0(4)
C(9)	C(10)	C(11)	128.4(7)	C(10)	C(11)	C(12)	119.6(7)
C(10)	C(11)	C(29)	121.1(7)	C(12)	C(11)	C(29)	118.8(7)
C(11)	C(12)	C(13)	122.8(7)	C(11)	C(12)	C(32)	118.9(8)
C(13)	C(12)	C(32)	118.3(8)	C(12)	C(13)	C(14)	124.7(8)
C(13)	C(14)	C(15)	126.3(8)	C(14)	C(15)	C(16)	120.8(7)
C(14)	C(15)	C(33)	121.1(8)	C(16)	C(15)	C(33)	118.0(8)
C(15)	C(16)	C(17)	117.3(7)	C(15)	C(16)	C(36)	118.3(7)
C(17)	C(16)	C(36)	124.4(7)	Ag(1)	C(17)	C(16)	100.3(4)
Ag(1)	C(17)	C(18)	75.7(4)	C(16)	C(17)	C(18)	132.5(7)
Ag(1)	C(18)	C(17)	73.7(5)	Ag(1)	C(18)	C(19)	102.6(4)
C(17)	C(18)	C(19)	131.2(7)	C(18)	C(19)	C(20)	120.0(7)
C(18)	C(19)	C(37)	120.9(7)	C(20)	C(19)	C(37)	119.0(7)

Table 5. Bond Angles(°) (continued)

atom	atom	atom	angle	atom	atom	atom	angle
C(1)	C(20)	C(19)	117.6(6)	C(1)	C(20)	C(40)	122.3(7)
C(19)	C(20)	C(40)	120.1(7)	C(3)	C(21)	C(22)	120.4(8)
C(21)	C(22)	C(23)	121.4(9)	C(22)	C(23)	C(24)	119.4(8)
C(4)	C(24)	C(23)	120.9(8)	C(7)	C(25)	C(26)	120.5(7)
C(25)	C(26)	C(27)	121.0(8)	C(26)	C(27)	C(28)	119.3(8)
C(8)	C(28)	C(27)	121.1(8)	C(11)	C(29)	C(30)	120.7(7)
C(29)	C(30)	C(31)	120.5(8)	C(30)	C(31)	C(32)	119.1(8)
C(12)	C(32)	C(31)	122.0(8)	C(15)	C(33)	C(34)	122.6(8)
C(33)	C(34)	C(35)	119.4(8)	C(34)	C(35)	C(36)	120.4(8)
C(16)	C(36)	C(35)	121.4(7)	C(19)	C(37)	C(38)	120.2(7)
C(37)	C(38)	C(39)	120.2(7)	C(38)	C(39)	C(40)	121.0(8)
C(20)	C(40)	C(39)	119.4(7)				