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#1 Data block identification for start of deposition

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_compound_id		4
_data	br06	
_compound_id		5*
_data	AHMT	
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_data	HERNAI	
_compound_id		14b

#-----
#2 Person making the deposition

_publ_contact_author	'M.C. Ramirez de Arellano'
_publ_contact_author_address	
;	Departamento de Quimica Organica
	Facultad de Farmacia
	Universidad de Valencia
	46100 Valencia
	Spain
;	
_publ_contact_author_email	mcra@uv.es
_ccdc_journal_depnumber	

#-----
#3 Publication details

loop_	
_publ_title	
_publ_author_name	
	'J. Vicente, J.A. Abad, F.S. Hernandez-Mata, B. Rink, P.G. Jones
	and M.C. Ramirez de Arellano'
_journal_name_full	'Organometallics'

#-----
#4

data_br04	
_audit_creation_method	SHELXL-97
_chemical_name_systematic	
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;	
_chemical_name_common	?
_chemical_melting_point	?
_chemical_formula_moiety	?
_chemical_formula_sum	
	'C22 H25 Cl N2 O4 Pd'
_chemical_formula_weight	523.29
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_atom_type_symbol	
_atom_type_description	

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_atom_type_scatter_dispersion_imag
_atom_type_scatter_source
'C' 'C' 0.0033 0.0016
'International Tables Vol C Tables 4.2.6.8 and 6.1.1.4'
'H' 'H' 0.0000 0.0000
'International Tables Vol C Tables 4.2.6.8 and 6.1.1.4'
'N' 'N' 0.0061 0.0033
'International Tables Vol C Tables 4.2.6.8 and 6.1.1.4'
'O' 'O' 0.0106 0.0060
'International Tables Vol C Tables 4.2.6.8 and 6.1.1.4'
'Cl' 'Cl' 0.1484 0.1585
'International Tables Vol C Tables 4.2.6.8 and 6.1.1.4'
'Pd' 'Pd' -0.9988 1.0072
'International Tables Vol C Tables 4.2.6.8 and 6.1.1.4'

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  'x, y, z'
  '-x, -y, -z'

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_cell_length_c         13.2560(9)
_cell_angle_alpha       84.966(5)
_cell_angle_beta        82.327(5)
_cell_angle_gamma       62.438(3)
_cell_volume            1071.04(11)
_cell_formula_units_Z    2
_cell_measurement_temperature 173(2)
_cell_measurement_reflns_used 62
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_cell_measurement_theta_max 12.51

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_exptl_crystal_size_min  0.32
_exptl_crystal_density_meas ?
_exptl_crystal_density_diffn 1.623
_exptl_crystal_density_method 'not measured'
_exptl_crystal_F_000     532
_exptl_absorpt_coefficient_mu 1.023
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_computing_cell_refinement	'Siemens XSCANS 2.1'
_computing_data_reduction	'Siemens XSCANS 2.1'
_computing_structure_solution	'SHELXS-97 (Sheldrick, 1990)'
_computing_structure_refinement	'SHELXL-97 (Sheldrick, 1997)'
_computing_molecular_graphics	'SHELXTL v6.12 (Bruker, 1997)'
_computing_publication_material	'SHELXL-97 (Sheldrick, 1997)'

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Refinement of F^2 against ALL reflections. The weighted R-factor wR and goodness of fit S are based on F^2 , conventional R-factors R are based on F , with F set to zero for negative F^2 . The threshold expression of $F^2 > 2\sigma(F^2)$ is used only for calculating R-factors(gt) etc. and is not relevant to the choice of reflections for refinement. R-factors based on F^2 are statistically about twice as large as those based on F , and R-factors based on ALL data will be even larger.

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_refine_ls_weighting_details	'calc w=1/[\s^2*(Fo^2)+(0.0543P)^2+1.9262P] where P=(Fo^2+2Fc^2)/3'
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_atom_sites_solution_secondary	difmap
_atom_sites_solution_hydrogens	geom
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Pd Pd 0.12733(3) 1.08999(2) 0.156195(16) 0.01928(11) Uani 1 1 d . . .
Cl Cl 0.29597(11) 1.19921(11) 0.10033(8) 0.0402(2) Uani 1 1 d . . .
N1 N -0.0381(3) 1.0062(3) 0.1959(2) 0.0219(5) Uani 1 1 d . . .
N2 N -0.0388(3) 1.2014(3) 0.0451(2) 0.0227(5) Uani 1 1 d . . .
O1 O 0.2479(4) 1.2897(3) 0.3866(3) 0.0580(9) Uani 1 1 d . . .
O2 O 0.0474(4) 1.2430(4) 0.4649(2) 0.0480(7) Uani 1 1 d . . .
O3 O 0.4864(3) 0.5124(3) 0.2831(2) 0.0399(6) Uani 1 1 d . . .
O4 O 0.7282(3) 0.5278(3) 0.2918(2) 0.0468(7) Uani 1 1 d . . .
C1 C 0.2663(4) 0.9813(4) 0.2684(2) 0.0225(6) Uani 1 1 d . . .
C2 C 0.2653(4) 1.0528(4) 0.3556(3) 0.0269(7) Uani 1 1 d . . .
C3 C 0.3630(4) 0.9673(4) 0.4317(3) 0.0301(7) Uani 1 1 d . . .
H3 H 0.3618 1.0164 0.4904 0.036 Uiso 1 1 calc R . .
C4 C 0.4616(4) 0.8129(4) 0.4238(2) 0.0291(7) Uani 1 1 d . . .
H4 H 0.5290 0.7569 0.4759 0.035 Uiso 1 1 calc R . .
C5 C 0.4617(4) 0.7399(4) 0.3387(2) 0.0244(7) Uani 1 1 d . . .
C6 C 0.3650(4) 0.8251(4) 0.2624(2) 0.0235(6) Uani 1 1 d . . .
H6 H 0.3662 0.7751 0.2042 0.028 Uiso 1 1 calc R . .
C7 C 0.1557(4) 1.2199(4) 0.3712(3) 0.0337(8) Uani 1 1 d . . .
H7 H 0.0916 1.2678 0.3117 0.040 Uiso 1 1 calc R . .
C8 C 0.1586(7) 1.4515(6) 0.3823(5) 0.0671(15) Uani 1 1 d . . .
H8A H 0.0764 1.4829 0.3341 0.101 Uiso 1 1 calc R . .
H8B H 0.2342 1.4945 0.3599 0.101 Uiso 1 1 calc R . .
H8C H 0.1038 1.4881 0.4501 0.101 Uiso 1 1 calc R . .
C9 C -0.0855(5) 1.2156(5) 0.4540(3) 0.0474(10) Uani 1 1 d . . .
H9A H -0.1441 1.2789 0.3975 0.071 Uiso 1 1 calc R . .
H9B H -0.1600 1.2405 0.5170 0.071 Uiso 1 1 calc R . .
H9C H -0.0450 1.1083 0.4397 0.071 Uiso 1 1 calc R . .
C10 C 0.5655(4) 0.5704(4) 0.3334(3) 0.0318(8) Uani 1 1 d . . .
H10 H 0.5696 0.5282 0.4048 0.038 Uiso 1 1 calc R . .
C11 C 0.5593(6) 0.3504(5) 0.2873(3) 0.0475(10) Uani 1 1 d . . .
H11A H 0.6738 0.3087 0.2576 0.071 Uiso 1 1 calc R . .

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H11B H 0.4993 0.3166 0.2488 0.071 Uiso 1 1 calc R . .
 H11C H 0.5549 0.3146 0.3584 0.071 Uiso 1 1 calc R . .
 C12 C 0.7479(5) 0.5584(5) 0.1849(3) 0.0443(10) Uani 1 1 d . . .
 H12A H 0.6957 0.5133 0.1490 0.066 Uiso 1 1 calc R . .
 H12B H 0.8649 0.5145 0.1608 0.066 Uiso 1 1 calc R . .
 H12C H 0.6966 0.6685 0.1716 0.066 Uiso 1 1 calc R . .
 C21 C -0.1668(4) 1.0603(4) 0.1394(2) 0.0228(6) Uani 1 1 d . . .
 C22 C -0.2889(4) 1.0165(4) 0.1593(3) 0.0308(7) Uani 1 1 d . . .
 H22 H -0.3749 1.0526 0.1167 0.037 Uiso 1 1 calc R . .
 C23 C -0.2861(4) 0.9202(4) 0.2414(3) 0.0347(8) Uani 1 1 d . . .
 H23 H -0.3723 0.8929 0.2580 0.042 Uiso 1 1 calc R . .
 C24 C -0.1549(4) 0.8643(4) 0.2990(3) 0.0325(8) Uani 1 1 d . . .
 H24 H -0.1486 0.7961 0.3551 0.039 Uiso 1 1 calc R . .
 C25 C -0.0346(4) 0.9083(4) 0.2742(2) 0.0274(7) Uani 1 1 d . . .
 H25 H 0.0556 0.8683 0.3137 0.033 Uiso 1 1 calc R . .
 C26 C -0.1701(4) 1.1748(4) 0.0580(2) 0.0234(6) Uani 1 1 d . . .
 C27 C -0.3026(4) 1.2564(4) 0.0017(3) 0.0308(7) Uani 1 1 d . . .
 H27 H -0.3943 1.2362 0.0108 0.037 Uiso 1 1 calc R . .
 C28 C -0.2988(5) 1.3670(4) -0.0675(3) 0.0352(8) Uani 1 1 d . . .
 H28 H -0.3893 1.4257 -0.1053 0.042 Uiso 1 1 calc R . .
 C29 C -0.1619(5) 1.3917(4) -0.0815(3) 0.0346(8) Uani 1 1 d . . .
 H29 H -0.1560 1.4660 -0.1298 0.042 Uiso 1 1 calc R . .
 C30 C -0.0343(4) 1.3061(4) -0.0237(3) 0.0299(7) Uani 1 1 d . . .
 H30 H 0.0601 1.3223 -0.0332 0.036 Uiso 1 1 calc R . .

loop_

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 _atom_site_aniso_U_23
 _atom_site_aniso_U_13
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 Cl 0.0271(4) 0.0399(5) 0.0594(6) 0.0192(4) -0.0141(4) -0.0211(4)
 N1 0.0205(13) 0.0250(14) 0.0203(13) -0.0005(10) -0.0045(10) -0.0098(11)
 N2 0.0205(13) 0.0207(13) 0.0219(13) -0.0004(10) -0.0025(10) -0.0052(11)
 O1 0.0514(18) 0.0353(16) 0.093(3) -0.0133(16) -0.0180(17) -0.0199(14)
 O2 0.0403(16) 0.0556(19) 0.0437(16) -0.0118(14) -0.0014(13) -0.0171(14)
 O3 0.0398(15) 0.0281(13) 0.0511(17) -0.0002(12) -0.0088(12) -0.0139(12)
 O4 0.0331(15) 0.0451(17) 0.0533(18) -0.0001(13) -0.0044(13) -0.0107(13)
 C1 0.0179(14) 0.0240(16) 0.0267(16) 0.0022(12) -0.0060(12) -0.0102(13)
 C2 0.0208(15) 0.0325(18) 0.0284(17) -0.0052(14) -0.0024(13) -0.0125(14)
 C3 0.0269(17) 0.040(2) 0.0230(16) -0.0052(14) -0.0037(13) -0.0140(15)
 C4 0.0237(16) 0.043(2) 0.0198(16) 0.0046(14) -0.0062(13) -0.0141(15)
 C5 0.0189(15) 0.0282(17) 0.0263(16) 0.0057(13) -0.0036(12) -0.0116(13)
 C6 0.0223(15) 0.0258(16) 0.0230(15) -0.0003(12) -0.0056(12) -0.0106(13)
 C7 0.0295(18) 0.0332(19) 0.0358(19) -0.0103(15) -0.0038(15) -0.0104(15)
 C8 0.063(3) 0.041(3) 0.099(4) -0.017(3) 0.009(3) -0.028(2)
 C9 0.035(2) 0.050(2) 0.050(2) 0.0031(19) -0.0053(18) -0.0148(19)
 C10 0.0269(17) 0.0297(18) 0.0340(18) 0.0102(14) -0.0067(14) -0.0100(15)
 C11 0.054(3) 0.031(2) 0.050(2) -0.0015(18) -0.002(2) -0.0147(19)
 C12 0.042(2) 0.041(2) 0.043(2) -0.0042(17) 0.0124(18) -0.0169(18)
 C21 0.0176(15) 0.0262(16) 0.0218(15) -0.0039(12) -0.0014(12) -0.0074(13)
 C22 0.0209(16) 0.0349(19) 0.0367(19) -0.0033(15) -0.0051(14) -0.0120(14)
 C23 0.0297(18) 0.038(2) 0.040(2) -0.0031(16) 0.0034(15) -0.0205(16)
 C24 0.0358(19) 0.0342(19) 0.0296(18) 0.0023(14) 0.0014(15) -0.0195(16)

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C25 0.0298(17) 0.0289(17) 0.0236(16) 0.0036(13) -0.0050(13) -0.0136(14)
C26 0.0207(15) 0.0257(16) 0.0200(15) -0.0047(12) -0.0034(12) -0.0066(13)
C27 0.0267(17) 0.0332(18) 0.0287(17) -0.0020(14) -0.0117(14) -0.0082(15)
C28 0.037(2) 0.0300(18) 0.0294(18) -0.0013(14) -0.0173(15) -0.0036(15)
C29 0.044(2) 0.0290(18) 0.0238(17) 0.0046(14) -0.0088(15) -0.0098(16)
C30 0.0316(18) 0.0298(18) 0.0248(17) 0.0028(13) -0.0019(14) -0.0119(15)

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_geom_special_details

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All esds (except the esd in the dihedral angle between two l.s. planes) are estimated using the full covariance matrix. The cell esds are taken into account individually in the estimation of esds in distances, angles and torsion angles; correlations between esds in cell parameters are only used when they are defined by crystal symmetry. An approximate (isotropic) treatment of cell esds is used for estimating esds involving l.s. planes.

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loop_

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Pd N1 2.050(3) . ?
Pd N2 2.122(3) . ?
Pd C1 2.2985(9) . ?
N1 C25 1.352(4) . ?
N1 C21 1.358(4) . ?
N2 C30 1.334(4) . ?
N2 C26 1.346(4) . ?
O1 C7 1.367(5) . ?
O1 C8 1.428(6) . ?
O2 C9 1.404(5) . ?
O2 C7 1.451(5) . ?
O3 C10 1.378(5) . ?
O3 C11 1.428(5) . ?
O4 C10 1.408(4) . ?
O4 C12 1.428(5) . ?
C1 C6 1.392(5) . ?
C1 C2 1.406(5) . ?
C2 C3 1.393(5) . ?
C2 C7 1.507(5) . ?
C3 C4 1.380(5) . ?
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C5 C6 1.390(5) . ?
C5 C10 1.507(5) . ?
C21 C22 1.376(5) . ?
C21 C26 1.489(5) . ?
C22 C23 1.379(5) . ?
C23 C24 1.384(5) . ?
C24 C25 1.368(5) . ?
C26 C27 1.392(5) . ?
C27 C28 1.379(5) . ?
C28 C29 1.385(6) . ?
C29 C30 1.380(5) . ?

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C1 Pd N2 174.38(11) . . ?
N1 Pd N2 79.15(10) . . ?
C1 Pd C1 90.05(9) . . ?
N1 Pd C1 174.40(7) . . ?
N2 Pd C1 95.29(8) . . ?
C25 N1 C21 117.6(3) . . ?
C25 N1 Pd 126.6(2) . . ?
C21 N1 Pd 115.7(2) . . ?
C30 N2 C26 119.6(3) . . ?
C30 N2 Pd 126.1(2) . . ?
C26 N2 Pd 113.6(2) . . ?
C7 O1 C8 113.0(4) . . ?
C9 O2 C7 112.2(3) . . ?
C10 O3 C11 113.6(3) . . ?
C10 O4 C12 114.8(3) . . ?
C6 C1 C2 118.0(3) . . ?
C6 C1 Pd 118.5(2) . . ?
C2 C1 Pd 123.5(2) . . ?
C3 C2 C1 119.7(3) . . ?
C3 C2 C7 118.6(3) . . ?
C1 C2 C7 121.7(3) . . ?
C4 C3 C2 121.5(3) . . ?
C3 C4 C5 119.5(3) . . ?
C6 C5 C4 119.1(3) . . ?
C6 C5 C10 122.3(3) . . ?
C4 C5 C10 118.6(3) . . ?
C5 C6 C1 122.3(3) . . ?
O1 C7 O2 104.0(3) . . ?
O1 C7 C2 109.7(3) . . ?
O2 C7 C2 110.5(3) . . ?
O3 C10 O4 113.6(3) . . ?
O3 C10 C5 108.3(3) . . ?
O4 C10 C5 113.2(3) . . ?
N1 C21 C22 121.8(3) . . ?
N1 C21 C26 115.5(3) . . ?
C22 C21 C26 122.6(3) . . ?
C21 C22 C23 119.8(3) . . ?
C22 C23 C24 118.5(3) . . ?
C25 C24 C23 119.2(3) . . ?
N1 C25 C24 122.9(3) . . ?
N2 C26 C27 121.0(3) . . ?
N2 C26 C21 115.6(3) . . ?
C27 C26 C21 123.3(3) . . ?
C28 C27 C26 119.1(3) . . ?
C27 C28 C29 119.4(3) . . ?
C30 C29 C28 118.5(3) . . ?
N2 C30 C29 122.3(3) . . ?

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  _geom_torsion_site_symmetry_4
  _geom_torsion_publ_flag
C1 Pd N1 C25 -0.7(3) . . . . ?
N2 Pd N1 C25 -179.0(3) . . . . ?
C1 Pd N1 C25 -173.0(6) . . . . ?
C1 Pd N1 C21 176.5(2) . . . . ?
N2 Pd N1 C21 -1.8(2) . . . . ?
C1 Pd N1 C21 4.3(9) . . . . ?
C1 Pd N2 C30 157.4(11) . . . . ?
N1 Pd N2 C30 175.1(3) . . . . ?
C1 Pd N2 C30 -4.3(3) . . . . ?
C1 Pd N2 C26 -13.1(12) . . . . ?
N1 Pd N2 C26 4.6(2) . . . . ?
C1 Pd N2 C26 -174.8(2) . . . . ?
N1 Pd C1 C6 72.6(3) . . . . ?
N2 Pd C1 C6 90.1(12) . . . . ?
C1 Pd C1 C6 -108.1(2) . . . . ?
N1 Pd C1 C2 -104.7(3) . . . . ?
N2 Pd C1 C2 -87.2(12) . . . . ?
C1 Pd C1 C2 74.6(3) . . . . ?
C6 C1 C2 C3 0.9(5) . . . . ?
Pd C1 C2 C3 178.2(2) . . . . ?
C6 C1 C2 C7 -176.8(3) . . . . ?
Pd C1 C2 C7 0.5(5) . . . . ?
C1 C2 C3 C4 -0.1(5) . . . . ?
C7 C2 C3 C4 177.7(3) . . . . ?
C2 C3 C4 C5 -1.1(5) . . . . ?
C3 C4 C5 C6 1.5(5) . . . . ?
C3 C4 C5 C10 -177.8(3) . . . . ?
C4 C5 C6 C1 -0.7(5) . . . . ?
C10 C5 C6 C1 178.6(3) . . . . ?
C2 C1 C6 C5 -0.5(5) . . . . ?
Pd C1 C6 C5 -178.0(2) . . . . ?
C8 O1 C7 O2 -73.2(5) . . . . ?
C8 O1 C7 C2 168.6(4) . . . . ?
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C9 O2 C7 C2 -78.3(4) . . . . ?
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C1 C2 C7 O2 121.4(3) . . . . ?
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C4 C5 C10 O4 -86.5(4) ?
 C25 N1 C21 C22 -0.9(5) ?
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 Pd N1 C25 C24 176.3(3) ?
 C23 C24 C25 N1 0.7(5) ?
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Refinement of F^2 against ALL reflections. The weighted R-factor wR and goodness of fit S are based on F^2 , conventional R-factors R are based on F , with F set to zero for negative F^2 . The threshold expression of

$F^2 > 2\sigma(F^2)$ is used only for calculating R-factors(gt) etc. and is not relevant to the choice of reflections for refinement. R-factors based on F^2 are statistically about twice as large as those based on F , and R-factors based on ALL data will be even larger.

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Cl Cl -0.29207(6) -0.33801(6) 0.73002(4) 0.03152(14) Uani 1 1 d . . .
P P -0.00810(5) -0.12373(5) 0.68698(3) 0.01806(12) Uani 1 1 d . . .
S1 S -0.08975(6) -0.23309(5) 0.94029(3) 0.02074(12) Uani 1 1 d . . .
S2 S 0.17383(6) -0.34132(6) 0.95812(5) 0.03657(16) Uani 1 1 d . . .
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C2 C 0.1888(2) -0.0680(2) 0.97666(13) 0.0185(4) Uani 1 1 d DU . .
C3 C 0.3201(2) 0.0180(2) 1.03769(14) 0.0234(4) Uani 1 1 d DU . .
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C6 C 0.2155(2) 0.0736(2) 0.87846(13) 0.0184(4) Uani 1 1 d DU . .
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C7 C 0.1075(2) -0.1925(2) 0.99720(13) 0.0222(4) Uani 1 1 d U . .
H7 H 0.1208 -0.1731 1.0630 0.027 Uiso 1 1 calc R . .
C8 C -0.1258(2) -0.4170(2) 0.91017(16) 0.0300(5) Uani 1 1 d U . .
H8A H -0.1351 -0.4514 0.9624 0.036 Uiso 1 1 calc R . .
H8B H -0.2201 -0.4605 0.8623 0.036 Uiso 1 1 calc R . .
C9 C 0.0028(3) -0.4509(2) 0.87846(16) 0.0323(5) Uani 1 1 d U . .
H9A H -0.0016 -0.4358 0.8190 0.039 Uiso 1 1 calc R . .
H9B H -0.0020 -0.5482 0.8736 0.039 Uiso 1 1 calc R . .
C10 C 0.4336(2) 0.2828(2) 0.91822(14) 0.0208(4) Uani 1 1 d U . .
H10 H 0.5235 0.3330 0.9695 0.025 Uiso 1 1 calc R . .
C11 C 0.4308(3) 0.4815(2) 0.84100(18) 0.0363(6) Uani 1 1 d U . .
H11A H 0.3795 0.5408 0.8134 0.044 Uiso 1 1 calc R . .
H11B H 0.5285 0.5392 0.8817 0.044 Uiso 1 1 calc R . .
C12 C 0.4527(3) 0.3717(3) 0.76993(16) 0.0397(6) Uani 1 1 d U . .
H12A H 0.5357 0.4115 0.7469 0.048 Uiso 1 1 calc R . .
H12B H 0.3610 0.3336 0.7197 0.048 Uiso 1 1 calc R . .
C21 C -0.1355(2) -0.2446(2) 0.58407(13) 0.0226(4) Uani 1 1 d DU . .
C22 C -0.1201(3) -0.3767(2) 0.56151(15) 0.0307(5) Uani 1 1 d DU . .
H22 H -0.0379 -0.3977 0.5951 0.037 Uiso 1 1 calc R . .
C23 C -0.2242(3) -0.4781(3) 0.49008(16) 0.0383(6) Uani 1 1 d DU . .
H23 H -0.2124 -0.5676 0.4743 0.046 Uiso 1 1 calc R . .
C24 C -0.3454(3) -0.4476(3) 0.44209(16) 0.0401(6) Uani 1 1 d DU . .
H24 H -0.4186 -0.5171 0.3946 0.048 Uiso 1 1 calc R . .
C25 C -0.3594(3) -0.3167(3) 0.46340(15) 0.0378(6) Uani 1 1 d DU . .
H25 H -0.4416 -0.2960 0.4296 0.045 Uiso 1 1 calc R . .
C26 C -0.2548(2) -0.2142(2) 0.53373(14) 0.0279(5) Uani 1 1 d DU . .
H26 H -0.2648 -0.1239 0.5473 0.033 Uiso 1 1 calc R . .
C31 C -0.0354(2) 0.0424(2) 0.68102(13) 0.0206(4) Uani 1 1 d DU . .
C32 C -0.1530(3) 0.0759(2) 0.71171(15) 0.0309(5) Uani 1 1 d DU . .
H32 H -0.2092 0.0159 0.7373 0.037 Uiso 1 1 calc R . .
C33 C -0.1881(3) 0.1960(3) 0.70518(18) 0.0400(6) Uani 1 1 d DU . .
H33 H -0.2694 0.2170 0.7252 0.048 Uiso 1 1 calc R . .
C34 C -0.1055(3) 0.2856(2) 0.66959(16) 0.0363(6) Uani 1 1 d DU . .
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C35 C 0.0133(3) 0.2552(2) 0.64122(16) 0.0353(5) Uani 1 1 d DU . .
H35 H 0.0714 0.3172 0.6177 0.042 Uiso 1 1 calc R . .
C36 C 0.0484(3) 0.1344(2) 0.64681(15) 0.0280(5) Uani 1 1 d DU . .
H36 H 0.1304 0.1145 0.6271 0.034 Uiso 1 1 calc R . .
C41 C 0.1730(2) -0.1323(2) 0.67021(13) 0.0220(4) Uani 1 1 d DU . .
C42 C 0.2085(3) -0.1141(2) 0.59201(15) 0.0292(5) Uani 1 1 d DU . .
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C46 C 0.2723(2) -0.1685(2) 0.73155(14) 0.0253(5) Uani 1 1 d DU . .
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are estimated using the full covariance matrix. The cell esds are taken
into account individually in the estimation of esds in distances, angles
and torsion angles; correlations between esds in cell parameters are only
used when they are defined by crystal symmetry. An approximate (isotropic)
treatment of cell esds is used for estimating esds involving l.s. planes.
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Pd S1 2.3286(5) . ?
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P C21 1.829(2) . ?
S1 C8 1.805(2) . ?
S1 C7 1.820(2) . ?
S2 C9 1.805(2) . ?
S2 C7 1.837(2) . ?
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Refinement of F^2 against ALL reflections. The weighted R-factor wR and goodness of fit S are based on F^2 , conventional R-factors R are based on F, with F set to zero for negative F^2 . The threshold expression of $F^2 > 2\text{sigma}(F^2)$ is used only for calculating R-factors(gt) etc. and is not relevant to the choice of reflections for refinement. R-factors based on F^2 are statistically about twice as large as those based on F, and R-factors based on ALL data will be even larger.
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 H33 H 0.0906 0.4157 0.3875 0.040 Uiso 1 1 calc R . .
 C34 C 0.0384(2) 0.51043(14) 0.40509(16) 0.0386(6) Uani 1 1 d DU . .
 H34 H -0.0392 0.5000 0.3946 0.046 Uiso 1 1 calc R . .
 C35 C 0.07373(19) 0.57563(14) 0.42639(16) 0.0365(5) Uani 1 1 d DU . .
 H35 H 0.0202 0.6095 0.4325 0.044 Uiso 1 1 calc R . .
 C36 C 0.18698(18) 0.59210(11) 0.43899(14) 0.0272(4) Uani 1 1 d DU . .
 C37 C 0.3119(2) 0.41898(11) 0.40326(16) 0.0320(5) Uani 1 1 d U . .
 H37A H 0.3127 0.4086 0.3376 0.038 Uiso 1 1 calc R . .
 H37B H 0.2894 0.3789 0.4345 0.038 Uiso 1 1 calc R . .
 H37C H 0.3870 0.4330 0.4336 0.038 Uiso 1 1 calc R . .
 C38 C 0.2265(2) 0.66228(12) 0.46313(18) 0.0380(6) Uani 1 1 d U . .
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 H38B H 0.2600 0.6809 0.4121 0.046 Uiso 1 1 calc R . .
 H38C H 0.2826 0.6616 0.5204 0.046 Uiso 1 1 calc R . .
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 N3 N 0.37835(13) 0.56191(8) 0.43332(11) 0.0207(3) Uani 1 1 d U . .
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 H99B H -0.5347 0.6923 0.1678 0.053 Uiso 1 1 calc R . .
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S3 0.0471(3) 0.0297(3) 0.0239(3) 0.0034(2) 0.0034(2) -0.0049(2)
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C6 0.0548(16) 0.0376(14) 0.0397(15) -0.0016(11) 0.0113(12) 0.0103(12)
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C11 0.0199(9) 0.0206(9) 0.0173(9) -0.0007(7) 0.0018(7) -0.0012(7)
C12 0.0203(10) 0.0256(10) 0.0257(11) -0.0015(8) 0.0030(8) -0.0005(8)
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C33 0.0317(12) 0.0461(13) 0.0212(11) 0.0036(10) 0.0023(9) -0.0159(10)
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C37 0.0434(13) 0.0247(11) 0.0298(12) 0.0003(9) 0.0115(10) -0.0073(9)
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N3 0.0185(8) 0.0222(8) 0.0211(8) -0.0006(7) 0.0031(6) -0.0009(6)
C99 0.0555(17) 0.0338(13) 0.0410(15) 0.0054(11) 0.0028(12) 0.0026(12)
C11 0.0621(5) 0.0366(3) 0.0641(5) 0.0045(3) -0.0192(4) 0.0077(3)
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All esds (except the esd in the dihedral angle between two l.s. planes) are estimated using the full covariance matrix. The cell esds are taken into account individually in the estimation of esds in distances, angles and torsion angles; correlations between esds in cell parameters are only used when they are defined by crystal symmetry. An approximate (isotropic) treatment of cell esds is used for estimating esds involving l.s. planes.

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S4 C4 1.827(2) . ?
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C21 N2 1.403(2) . ?
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C31 C32 1.399(3) . ?
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C33 C34 1.377(4) . ?
C34 C35 1.384(4) . ?
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C10 Pd I 175.79(5) . . ?
S1 Pd I 89.408(13) . . ?
C2 S1 C1 92.03(10) . . ?
C2 S1 Pd 109.93(7) . . ?
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C1 S2 C3 97.60(9) . . ?
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C6 S4 C4 98.34(11) . . ?
C11 C1 S2 116.81(13) . . ?
C11 C1 S1 111.91(13) . . ?
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C5 C6 S4 108.06(18) . . ?
N3 C10 C16 121.78(17) . . ?
N3 C10 Pd 127.51(14) . . ?
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N2 C20 Pd 174.30(18) . . ?
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Refinement of F^2 against ALL reflections. The weighted R-factor wR and goodness of fit S are based on F^2 , conventional R-factors R are based on F, with F set to zero for negative F^2 . The threshold expression of $F^2 > 2\text{sigma}(F^2)$ is used only for calculating R-factors(gt) etc. and is not relevant to the choice of reflections for refinement. R-factors based on F^2 are statistically about twice as large as those based on F, and R-factors based on ALL data will be even larger.

Slow convergence of the methyl group at C27 may indicate rotational disorder.

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I I 0.425970(9) 0.647857(9) 0.363563(9) 0.02050(4) Uani 1 1 d . . .

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S2 S 0.63688(4) 0.91280(3) 0.31229(3) 0.01991(14) Uani 1 1 d . . .

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C2 C 0.61927(13) 0.84283(13) 0.58446(12) 0.0161(5) Uani 1 1 d U . .

C3 C 0.69487(14) 0.83635(13) 0.59376(13) 0.0178(5) Uani 1 1 d U . .

C4 C 0.73456(13) 0.84982(13) 0.53598(13) 0.0179(5) Uani 1 1 d U . .

C5 C 0.69870(13) 0.87000(13) 0.46853(13) 0.0165(5) Uani 1 1 d U . .

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H7B H 0.5553 0.7601 0.7162 0.035 Uiso 1 1 calc R . .

H7C H 0.6291 0.7408 0.6825 0.035 Uiso 1 1 calc R . .

C8 C 0.76472(16) 0.87908(15) 0.69963(14) 0.0288(6) Uani 1 1 d U . .

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H8C H 0.7278 0.9156 0.7115 0.035 Uiso 1 1 calc R . .

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H9B H 0.9041 0.8526 0.5127 0.035 Uiso 1 1 calc R . .

H9C H 0.8445 0.9127 0.4788 0.035 Uiso 1 1 calc R . .

O1 O 0.57934(10) 0.83409(9) 0.64185(9) 0.0223(4) Uani 1 1 d U . .
O2 O 0.72974(9) 0.81596(9) 0.66071(9) 0.0221(4) Uani 1 1 d U . .
O3 O 0.80862(9) 0.84295(10) 0.55090(9) 0.0249(4) Uani 1 1 d U . .
C10 C 0.58313(13) 0.89974(13) 0.38629(12) 0.0156(5) Uani 1 1 d U . .
H10 H 0.5562 0.9482 0.3931 0.019 Uiso 1 1 calc R . .
C11 C 0.58814(14) 0.76467(13) 0.32747(13) 0.0192(5) Uani 1 1 d U . .
H11A H 0.6149 0.7422 0.3716 0.023 Uiso 1 1 calc R . .
H11B H 0.5669 0.7227 0.2963 0.023 Uiso 1 1 calc R . .
C12 C 0.64001(13) 0.81190(13) 0.28692(13) 0.0185(5) Uani 1 1 d U . .
H12A H 0.6262 0.8066 0.2341 0.022 Uiso 1 1 calc R . .
H12B H 0.6903 0.7925 0.2984 0.022 Uiso 1 1 calc R . .
N2 N 0.39853(11) 0.69248(11) 0.57358(11) 0.0181(4) Uani 1 1 d U . .
C20 C 0.41950(13) 0.72820(13) 0.52815(13) 0.0178(5) Uani 1 1 d U . .
C21 C 0.38373(13) 0.64171(13) 0.62854(12) 0.0164(5) Uani 1 1 d U . .
C22 C 0.32710(14) 0.65780(14) 0.66948(13) 0.0208(5) Uani 1 1 d U . .
C23 C 0.31720(15) 0.60675(14) 0.72495(14) 0.0248(6) Uani 1 1 d U . .
H23 H 0.2796 0.6158 0.7546 0.030 Uiso 1 1 calc R . .
C24 C 0.36130(16) 0.54304(15) 0.73759(14) 0.0272(6) Uani 1 1 d U . .
H24 H 0.3546 0.5098 0.7766 0.033 Uiso 1 1 calc R . .
C25 C 0.41480(15) 0.52768(15) 0.69386(15) 0.0277(6) Uani 1 1 d U . .
H25 H 0.4433 0.4827 0.7021 0.033 Uiso 1 1 calc R . .
C26 C 0.42806(14) 0.57652(14) 0.63793(14) 0.0221(6) Uani 1 1 d U . .
C27 C 0.27627(16) 0.72447(15) 0.65253(15) 0.0299(6) Uani 1 1 d U . .
H27A H 0.2285 0.7057 0.6316 0.045 Uiso 1 1 calc R . .
H27B H 0.2963 0.7584 0.6179 0.045 Uiso 1 1 calc R . .
H27C H 0.2710 0.7526 0.6971 0.045 Uiso 1 1 calc R . .
C28 C 0.48618(16) 0.56092(16) 0.59022(16) 0.0337(7) Uani 1 1 d U . .
H28A H 0.4659 0.5665 0.5394 0.040 Uiso 1 1 calc R . .
H28B H 0.5045 0.5088 0.5986 0.040 Uiso 1 1 calc R . .

H28C H 0.5263 0.5972 0.6013 0.040 Uiso 1 1 calc R . .
N3 N 0.46556(11) 0.91700(10) 0.53160(10) 0.0153(4) Uani 1 1 d U . .
C30 C 0.50110(13) 0.86457(12) 0.50646(12) 0.0141(5) Uani 1 1 d U . .
C31 C 0.38812(13) 0.92024(12) 0.52683(13) 0.0158(5) Uani 1 1 d U . .
C32 C 0.34581(13) 0.94149(13) 0.46202(13) 0.0175(5) Uani 1 1 d U . .
C33 C 0.27094(14) 0.94842(13) 0.46286(14) 0.0213(5) Uani 1 1 d U . .
H33 H 0.2415 0.9627 0.4197 0.026 Uiso 1 1 calc R . .
C34 C 0.23834(14) 0.93504(14) 0.52486(15) 0.0251(6) Uani 1 1 d U . .
H34 H 0.1869 0.9389 0.5238 0.030 Uiso 1 1 calc R . .
C35 C 0.28102(14) 0.91587(13) 0.58881(15) 0.0231(6) Uani 1 1 d U . .
H35 H 0.2586 0.9073 0.6316 0.028 Uiso 1 1 calc R . .
C36 C 0.35641(14) 0.90911(13) 0.59074(13) 0.0187(5) Uani 1 1 d U . .
C37 C 0.37943(14) 0.95778(14) 0.39358(13) 0.0219(6) Uani 1 1 d U . .
H37A H 0.3893 0.9096 0.3699 0.026 Uiso 1 1 calc R . .
H37B H 0.4251 0.9858 0.4054 0.026 Uiso 1 1 calc R . .
H37C H 0.3457 0.9885 0.3609 0.026 Uiso 1 1 calc R . .
C38 C 0.40372(14) 0.88899(15) 0.66026(13) 0.0237(6) Uani 1 1 d U . .
H38A H 0.3750 0.8936 0.7012 0.028 Uiso 1 1 calc R . .
H38B H 0.4454 0.9239 0.6672 0.028 Uiso 1 1 calc R . .
H38C H 0.4213 0.8365 0.6573 0.028 Uiso 1 1 calc R . .

loop_

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_atom_site_aniso_U_22

_atom_site_aniso_U_33

_atom_site_aniso_U_23

_atom_site_aniso_U_13

_atom_site_aniso_U_12

Pd 0.01408(9) 0.01341(9) 0.01317(9) -0.00058(7) 0.00150(7) -0.00079(7)
I 0.02453(9) 0.01683(8) 0.01961(8) -0.00292(7) 0.00030(6) -0.00351(7)
S1 0.0153(3) 0.0179(3) 0.0126(3) -0.0007(2) 0.0004(2) -0.0008(2)
S2 0.0244(4) 0.0202(3) 0.0160(3) 0.0017(2) 0.0064(3) -0.0027(3)
C1 0.0138(12) 0.0099(11) 0.0149(11) -0.0013(9) 0.0020(9) -0.0021(9)
C2 0.0225(13) 0.0130(12) 0.0131(11) 0.0000(9) 0.0029(9) 0.0009(10)
C3 0.0186(13) 0.0159(12) 0.0178(12) 0.0005(9) -0.0032(10) 0.0016(10)
C4 0.0147(12) 0.0153(11) 0.0230(13) -0.0017(10) -0.0011(10) 0.0005(10)
C5 0.0168(13) 0.0183(12) 0.0147(12) -0.0014(9) 0.0030(9) -0.0008(10)
C6 0.0192(13) 0.0119(11) 0.0130(11) -0.0018(9) -0.0008(9) -0.0012(9)
C7 0.0314(17) 0.0315(16) 0.0264(15) 0.0052(12) 0.0066(12) -0.0023(13)
C8 0.0303(16) 0.0333(15) 0.0206(14) -0.0001(11) -0.0068(12) -0.0010(12)
C9 0.0154(14) 0.0375(16) 0.0352(16) 0.0021(13) 0.0046(11) 0.0019(12)
O1 0.0253(10) 0.0273(10) 0.0149(9) 0.0042(7) 0.0047(7) 0.0050(8)
O2 0.0223(10) 0.0235(9) 0.0185(9) 0.0040(7) -0.0069(7) -0.0004(8)
O3 0.0128(9) 0.0347(11) 0.0266(10) 0.0052(8) -0.0006(7) 0.0032(8)
C10 0.0162(13) 0.0169(12) 0.0136(11) 0.0002(9) 0.0021(9) -0.0010(10)
C11 0.0222(14) 0.0172(12) 0.0185(12) -0.0036(10) 0.0028(10) 0.0013(10)
C12 0.0164(13) 0.0225(13) 0.0166(12) -0.0016(10) 0.0023(10) 0.0023(10)
N2 0.0191(11) 0.0182(11) 0.0174(11) -0.0028(8) 0.0038(8) -0.0003(9)
C20 0.0178(13) 0.0162(12) 0.0192(12) -0.0068(10) 0.0010(10) 0.0001(10)
C21 0.0190(13) 0.0139(11) 0.0164(12) 0.0023(9) 0.0022(9) -0.0046(10)
C22 0.0245(14) 0.0185(13) 0.0196(13) -0.0023(10) 0.0038(10) -0.0041(10)
C23 0.0305(16) 0.0235(14) 0.0219(14) -0.0027(11) 0.0097(11) -0.0078(12)
C24 0.0349(17) 0.0236(14) 0.0226(14) 0.0060(11) 0.0006(12) -0.0078(12)
C25 0.0312(16) 0.0177(13) 0.0333(16) 0.0062(11) 0.0001(12) -0.0013(11)
C26 0.0200(14) 0.0223(13) 0.0239(14) 0.0006(10) 0.0018(11) -0.0003(10)
C27 0.0306(16) 0.0242(14) 0.0377(16) 0.0025(12) 0.0160(13) 0.0042(12)

C28 0.0333(17) 0.0267(15) 0.0434(18) 0.0031(13) 0.0148(14) 0.0107(13)
N3 0.0168(11) 0.0144(10) 0.0144(10) 0.0006(8) 0.0008(8) -0.0008(8)
C30 0.0190(13) 0.0125(11) 0.0106(11) 0.0015(9) 0.0010(9) -0.0014(9)
C31 0.0175(13) 0.0103(11) 0.0194(12) -0.0018(9) 0.0017(10) -0.0005(9)
C32 0.0192(13) 0.0118(11) 0.0209(12) -0.0041(10) -0.0002(10) -0.0001(10)
C33 0.0193(13) 0.0171(12) 0.0257(14) -0.0026(10) -0.0043(11) -0.0004(10)
C34 0.0147(13) 0.0189(13) 0.0418(17) -0.0035(12) 0.0036(12) 0.0005(10)
C35 0.0238(14) 0.0185(13) 0.0294(15) 0.0002(11) 0.0128(11) 0.0028(11)
C36 0.0218(14) 0.0131(11) 0.0217(13) -0.0021(10) 0.0038(10) 0.0000(10)
C37 0.0249(14) 0.0204(13) 0.0201(13) -0.0007(10) 0.0013(11) 0.0057(11)
C38 0.0252(15) 0.0248(14) 0.0217(13) 0.0009(11) 0.0060(11) 0.0027(11)

_geom_special_details

;

All esds (except the esd in the dihedral angle between two l.s. planes) are estimated using the full covariance matrix. The cell esds are taken into account individually in the estimation of esds in distances, angles and torsion angles; correlations between esds in cell parameters are only used when they are defined by crystal symmetry. An approximate (isotropic) treatment of cell esds is used for estimating esds involving l.s. planes.

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loop_

_geom_bond_atom_site_label_1

_geom_bond_atom_site_label_2

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Pd C20 1.965(3) . ?
Pd C30 2.033(2) . ?
Pd S1 2.3200(6) . ?
Pd I 2.7219(3) . ?
S1 C11 1.810(3) . ?
S1 C10 1.835(2) . ?
S2 C10 1.802(2) . ?
S2 C12 1.833(2) . ?
C1 C6 1.399(3) . ?
C1 C2 1.407(3) . ?
C1 C30 1.492(3) . ?
C2 O1 1.374(3) . ?
C2 C3 1.392(3) . ?
C3 O2 1.381(3) . ?
C3 C4 1.389(3) . ?
C4 O3 1.369(3) . ?
C4 C5 1.395(3) . ?
C5 C6 1.382(3) . ?
C6 C10 1.530(3) . ?
C7 O1 1.428(3) . ?
C8 O2 1.434(3) . ?
C9 O3 1.429(3) . ?
C11 C12 1.529(3) . ?
N2 C20 1.154(3) . ?
N2 C21 1.406(3) . ?
C21 C22 1.392(3) . ?
C21 C26 1.405(3) . ?
C22 C23 1.394(3) . ?
C22 C27 1.510(4) . ?

C23 C24 1.386(4) . ?
C24 C25 1.377(4) . ?
C25 C26 1.391(4) . ?
C26 C28 1.495(4) . ?
N3 C30 1.251(3) . ?
N3 C31 1.424(3) . ?
C31 C36 1.398(3) . ?
C31 C32 1.409(3) . ?
C32 C33 1.390(3) . ?
C32 C37 1.507(3) . ?
C33 C34 1.381(4) . ?
C34 C35 1.390(4) . ?
C35 C36 1.394(3) . ?
C36 C38 1.516(3) . ?

loop_

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C20 Pd C30 92.12(9) . . ?
C20 Pd S1 178.88(7) . . ?
C30 Pd S1 86.87(7) . . ?
C20 Pd I 90.98(7) . . ?
C30 Pd I 175.29(7) . . ?

S1 Pd I 90.059(16) . . ?
C11 S1 C10 91.69(11) . . ?
C11 S1 Pd 108.77(8) . . ?
C10 S1 Pd 109.90(8) . . ?
C10 S2 C12 96.34(11) . . ?
C6 C1 C2 118.4(2) . . ?
C6 C1 C30 121.9(2) . . ?
C2 C1 C30 119.6(2) . . ?
O1 C2 C3 121.0(2) . . ?
O1 C2 C1 118.5(2) . . ?
C3 C2 C1 120.4(2) . . ?
O2 C3 C4 120.6(2) . . ?
O2 C3 C2 119.3(2) . . ?
C4 C3 C2 120.1(2) . . ?
O3 C4 C3 115.6(2) . . ?
O3 C4 C5 124.3(2) . . ?
C3 C4 C5 120.0(2) . . ?
C6 C5 C4 119.8(2) . . ?
C5 C6 C1 121.3(2) . . ?
C5 C6 C10 120.8(2) . . ?
C1 C6 C10 118.0(2) . . ?
C2 O1 C7 115.56(19) . . ?
C3 O2 C8 113.04(18) . . ?
C4 O3 C9 118.22(19) . . ?
C6 C10 S2 117.19(17) . . ?
C6 C10 S1 111.44(16) . . ?
S2 C10 S1 103.01(11) . . ?
C12 C11 S1 108.19(16) . . ?
C11 C12 S2 110.81(17) . . ?

C20 N2 C21 170.3(2) . . ?
 N2 C20 Pd 169.9(2) . . ?
 C22 C21 C26 124.1(2) . . ?
 C22 C21 N2 119.4(2) . . ?
 C26 C21 N2 116.5(2) . . ?
 C21 C22 C23 116.5(2) . . ?
 C21 C22 C27 122.1(2) . . ?
 C23 C22 C27 121.3(2) . . ?
 C24 C23 C22 121.2(3) . . ?
 C25 C24 C23 120.3(2) . . ?
 C24 C25 C26 121.5(3) . . ?
 C25 C26 C21 116.3(2) . . ?
 C25 C26 C28 122.1(2) . . ?
 C21 C26 C28 121.6(2) . . ?
 C30 N3 C31 124.9(2) . . ?
 N3 C30 C1 122.2(2) . . ?
 N3 C30 Pd 129.09(18) . . ?
 C1 C30 Pd 108.74(15) . . ?
 C36 C31 C32 121.3(2) . . ?
 C36 C31 N3 117.3(2) . . ?
 C32 C31 N3 121.2(2) . . ?
 C33 C32 C31 117.9(2) . . ?
 C33 C32 C37 120.0(2) . . ?
 C31 C32 C37 122.1(2) . . ?
 C34 C33 C32 121.6(2) . . ?
 C33 C34 C35 119.8(2) . . ?
 C34 C35 C36 120.6(3) . . ?
 C35 C36 C31 118.8(2) . . ?

C35 C36 C38 121.2(2) . . ?

C31 C36 C38 120.0(2) . . ?

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