

Compound: Bis-imidazole, imidazolate, acetate nickel (II)

Crystal Data:

Space group P 2₁/a
 The lattice is centric primitive monoclinic Laue symmetry 2/m
 Multiplicity of a general site is 4
 The unique axis is b
 The symmetry of the point 0,0,0 contains 1bar

The equivalent positions are:

(1) X Y Z (2) 1/2-X 1/2+Y -Z

Lattice constants are

a = 12.3467(7) b = 14.8671(8) c = 8.6676(6)

Alpha = 90 Beta = 112.788(5) Gamma = 90

Cell volume = 1466.81(16)

Fractional Atomic Coordinates:

Name	X	Y	Z	Ui/Ui*100	Site sym	Mult	Type	Seq	Fractn
Ni	.7334(7)	.2475(5)	.3578(9)	8.45(20)	1	4	NI	1	1.0000
N1	.5797(16)	.3058(23)	.3593(38)	10.45(20)	1	4	N	2	1.0000
N2	.3998(16)	.2877(23)	.3576(34)	10.45(20)	1	4	N	3	1.0000
C1	.4924(30)	.2435(8)	.3391(33)	10.45(20)	1	4	C	4	1.0000
C2	.5367(30)	.3897(13)	.3740(41)	10.45(20)	1	4	C	5	1.0000
C3	.4248(28)	.3787(18)	.3709(41)	10.45(20)	1	4	C	6	1.0000
N4	.6697(22)	.1173(9)	.3185(52)	10.45(20)	1	4	N	7	1.0000
N5	.6309(23)	-.0146(18)	.4091(42)	10.45(20)	1	4	N	8	1.0000
C4	.6693(27)	.0720(25)	.4572(25)	10.45(20)	1	4	C	9	1.0000
C5	.6137(23)	-.0242(16)	.2427(43)	10.45(20)	1	4	C	10	1.0000
C6	.6289(26)	.0592(27)	.1838(22)	10.45(20)	1	4	C	11	1.0000
N4	.8052(38)	.2402(18)	.6211(13)	10.45(20)	1	4	N	12	1.0000
N6	.9416(22)	.2269(15)	.8800(39)	10.45(20)	1	4	N	13	1.0000
C7	.9245(30)	.2331(19)	.7132(55)	10.45(20)	1	4	C	14	1.0000
C8	.7498(14)	.2469(23)	.7318(59)	10.45(20)	1	4	C	15	1.0000
C9	.8342(42)	.2390(23)	.8919(34)	10.45(20)	1	4	C	16	1.0000
O1	.6744(19)	.2978(9)	.0968(16)	10.45(20)	1	4	O	17	1.0000
O2	.7734(16)	.3882(9)	.3127(17)	10.45(20)	1	4	O	18	1.0000
C10	.7167(18)	.3790(8)	.1490(16)	10.45(20)	1	4	C	19	1.0000
C11	.7014(26)	.4569(11)	.0282(25)	10.45(20)	1	4	C	20	1.0000

Relevant Bond Distances and Angles:

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Vector	Length	Optr Cell	Neighbor atom coordinates
Ni_N1	2.092(13)	1 0 0 0	.57973 .30584 .35935
Ni_N2	2.120(12)	-2 1 1 0	.89978 .21226 .35758
Ni_N4	2.068(11)	1 0 0 0	.66970 .11730 .31846
Ni_N4	2.107(10)	1 0 0 0	.80520 .24016 .62112
Ni_O1	2.220(12)	1 0 0 0	.67443 .29776 .09680
Ni_O2	2.218(13)	1 0 0 0	.77341 .38818 .31273

Angle	Degrees	atom 1 loc	atom 3 loc
N1_Ni_N2	169.8(19)	1 0 0 0	-2 1 1 0
N1_Ni_N4	95.8(13)	1 0 0 0	1 0 0 0
N1_Ni_O2	90.9(12)	1 0 0 0	1 0 0 0
N2_Ni_N4	94.3(12)	-2 1 1 0	1 0 0 0
N2_Ni_O2	89.3(11)	-2 1 1 0	1 0 0 0
N4_Ni_O2	95.9(13)	1 0 0 0	1 0 0 0

Vector	Length	Optr Cell	Neighbor atom coordinates
N1_Ni	2.092(13)	1 0 0 0	.73345 .24751 .35776
N1_C1	1.3805(17)	1 0 0 0	.49235 .24354 .33908
N1_C2	1.3807(16)	1 0 0 0	.53666 .38973 .37400

Angle	Degrees	atom 1 loc	atom 3 loc
Ni_N1_C1	112.8(26)	1 0 0 0	1 0 0 0
Ni_N1_C2	139.3(26)	1 0 0 0	1 0 0 0
C1_N1_C2	107.93(15)	1 0 0 0	1 0 0 0

Vector	Length	Optr Cell	Neighbor atom coordinates
N2_Ni	2.120(12)	-2 0 1 0	.23345 .25249 .35776
N2_C1	1.3805(17)	1 0 0 0	.49235 .24354 .33908
N2_C3	1.3814(16)	1 0 0 0	.42483 .37865 .37092

Angle	Degrees	atom 1 loc	atom 3 loc
Ni_N2_C1	136.7(27)	-2 0 1 0	1 0 0 0
Ni_N2_C3	115.3(27)	-2 0 1 0	1 0 0 0
C1_N2_C3	107.86(16)	1 0 0 0	1 0 0 0

Vector	Length	Optr Cell	Neighbor atom coordinates
C1_N1	1.3805(17)	1 0 0 0	.57973 .30584 .35935
C1_N2	1.3805(17)	1 0 0 0	.39978 .28774 .35758
C1_C2	2.2329(16)	1 0 0 0	.53666 .38973 .37400
C1_C3	2.2325(17)	1 0 0 0	.42483 .37865 .37092

Angle	Degrees	atom 1 loc	atom 3 loc
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N1_C1_C3		107.9(28)	1 0 0 0	1 0 0 0
Vector	Length	Optr Cell	Neighbor atom coordinates	
C2_N1	1.3807(16)	1 0 0 0	.57973	.30584 .35935
C2_C1	2.2329(16)	1 0 0 0	.49235	.24354 .33908
C2_C3	1.3804(16)	1 0 0 0	.42483	.37865 .37092
Angle		Degrees	atom 1 loc	atom 3 loc
C1_C2_C3		108.0(28)	1 0 0 0	1 0 0 0
Vector	Length	Optr Cell	Neighbor atom coordinates	
C3_N2	1.3814(16)	1 0 0 0	.39978	.28774 .35758
C3_C1	2.2325(17)	1 0 0 0	.49235	.24354 .33908
C3_C2	1.3804(16)	1 0 0 0	.53666	.38973 .37400
Angle		Degrees	atom 1 loc	atom 3 loc
C1_C3_C2		107.9(28)	1 0 0 0	1 0 0 0
Vector	Length	Optr Cell	Neighbor atom coordinates	
N4_N1	2.068(11)	1 0 0 0	.73345	.24751 .35776
N4_C4	1.3802(16)	1 0 0 0	.66926	.07201 .45723
N4_C6	1.3804(17)	1 0 0 0	.62890	.05923 .18382
Angle		Degrees	atom 1 loc	atom 3 loc
Ni_N4_C4		116.3(31)	1 0 0 0	1 0 0 0
Ni_N4_C6		135.7(31)	1 0 0 0	1 0 0 0
C4_N4_C6		107.96(13)	1 0 0 0	1 0 0 0
Vector	Length	Optr Cell	Neighbor atom coordinates	
N5_C4	1.3801(16)	1 0 0 0	.66926	.07201 .45723
N5_C5	1.3811(18)	1 0 0 0	.61366	-.02415 .24271
Angle		Degrees	atom 1 loc	atom 3 loc
C4_N5_C5		107.90(16)	1 0 0 0	1 0 0 0
Vector	Length	Optr Cell	Neighbor atom coordinates	
C4_N4	1.3802(16)	1 0 0 0	.66970	.11730 .31846
C4_N5	1.3801(16)	1 0 0 0	.63088	-.01463 .40909
C4_C5	2.2324(16)	1 0 0 0	.61366	-.02415 .24271
C4_C6	2.2328(16)	1 0 0 0	.62890	.05923 .18382
Angle		Degrees	atom 1 loc	atom 3 loc
N4_C4_C6		108.0(32)	1 0 0 0	1 0 0 0
Vector	Length	Optr Cell	Neighbor atom coordinates	
C5_N5	1.3811(18)	1 0 0 0	.63088	-.01463 .40909

C5_C4 2.2324(16) 1 0 0 0 .66926 .07201 .45723
 C5_C6 1.3809(17) 1 0 0 0 .62890 .05923 .18382

Angle
 C4_C5_C6

Degrees
 107.8(32)
 atom 1 loc atom 3 loc
 1 0 0 0 1 0 0 0

Vector
 C6_N4 1.3804(17) 1 0 0 0 .66970 .11730 .31846
 C6_C4 2.2328(16) 1 0 0 0 .66926 .07201 .45723
 C6_C5 1.3809(17) 1 0 0 0 .61366 -.02415 .24271

Angle
 C4_C6_C5

Degrees
 107.8(32)
 atom 1 loc atom 3 loc
 1 0 0 0 1 0 0 0

Vector
 N4_Ni 2.107(10) 1 0 0 0 .73345 .24751 .35776
 N4_C7 1.3805(17) 1 0 0 0 .92445 .23309 .71321
 N4_C8 1.3805(16) 1 0 0 0 .74982 .24688 .73180

Angle
 Ni_N4_C7
 Ni_N4_C8
 C7_N4_C8

Degrees
 122.(4)
 129.(4)
 107.95(16)
 atom 1 loc atom 3 loc
 1 0 0 0 1 0 0 0
 1 0 0 0 1 0 0 0
 1 0 0 0 1 0 0 0

Vector
 N6_C7 1.3806(17) 1 0 0 0 .92445 .23309 .71321
 N6_C9 1.3806(17) 1 0 0 0 .83420 .23901 .89191

Angle
 C7_N6_C9

Degrees
 107.93(16)
 atom 1 loc atom 3 loc
 1 0 0 0 1 0 0 0

Vector
 C7_N4 1.3805(17) 1 0 0 0 .80520 .24016 .62112
 C7_N6 1.3806(17) 1 0 0 0 .94156 .22694 .87999
 C7_C8 2.2329(16) 1 0 0 0 .74982 .24688 .73180
 C7_C9 2.2328(16) 1 0 0 0 .83420 .23901 .89191

Angle
 N4_C7_C9

Degrees
 108.(4)
 atom 1 loc atom 3 loc
 1 0 0 0 1 0 0 0

Vector
 C8_N4 1.3805(16) 1 0 0 0 .80520 .24016 .62112
 C8_C7 2.2329(16) 1 0 0 0 .92445 .23309 .71321
 C8_C9 1.3802(16) 1 0 0 0 .83420 .23901 .89191

Angle

Degrees
 atom 1 loc atom 3 loc

C7_C8_C9		108.(4)		1 0 0 0		1 0 0 0	
Vector	Length	Optr Cell	Neighbor atom coordinates				
C9_N6	1.3806(17)	1 0 0 0	.94156	.22694	.87999		
C9_C7	2.2328(16)	1 0 0 0	.92445	.23309	.71321		
C9_C8	1.3802(16)	1 0 0 0	.74982	.24688	.73180		
Angle		Degrees		atom 1 loc		atom 3 loc	
C7_C9_C8		108.(4)		1 0 0 0		1 0 0 0	
Vector	Length	Optr Cell	Neighbor atom coordinates				
O1_Ni	2.220(12)	1 0 0 0	.73345	.24751	.35776		
O1_C10	1.3237(17)	1 0 0 0	.71668	.37898	.14899		
O2_Ni	2.218(13)	1 0 0 0	.73345	.24751	.35776		
O2_C10	1.3242(18)	1 0 0 0	.71668	.37898	.14899		
C10_O1	1.3237(17)	1 0 0 0	.67443	.29776	.09680		
C10_O2	1.3242(18)	1 0 0 0	.77341	.38818	.31273		
C10_C11	1.5236(18)	1 0 0 0	.70142	.45693	.02821		
Angle		Degrees		atom 1 loc		atom 3 loc	
O1_C10_O2		115.81(17)		1 0 0 0		1 0 0 0	
O1_C10_C11		122.11(17)		1 0 0 0		1 0 0 0	
O2_C10_C11		122.08(17)		1 0 0 0		1 0 0 0	
Vector	Length	Optr Cell	Neighbor atom coordinates				
C11_C10	1.5236(18)	1 0 0 0	.71668	.37898	.14899		

Compound: Bis-imidazole, bis-imidazolate palladium(II)

Crystal Data:

Space group P n c a
 The lattice is centric primitive orthorhombic Laue symmetry mmm
 Multiplicity of a general site is 8
 The symmetry of the point 0,0,0 contains 1bar

The equivalent positions are:

(1) X Y Z (2) 1/2-X 1/2+Y 1/2+Z
 (3) X 1/2-Y 1/2+Z (4) 1/2-X -Y Z

Lattice constants are

a = 16.9300(10) b = 14.9344(9) c = 5.5825(28)

Alpha = 90 Beta = 90 Gamma = 90

Cell volume = 1405.35(14)

Fractional Atomic Coordinates:

Name	X	Y	Z	U _i /U _e *100	Site sym	Mult	Type	Seq	Fractn
Pd	.00000	.00000	.00000	2.47(8)	-1	4	PD	1	1.0000
N1	.0984(6)	.0797(12)	.0945(37)	4.47(8)	1	8	N	2	1.0000
N2	.2002(8)	.1312(14)	.3089(25)	4.47(8)	1	8	N	3	1.0000
C1	.1454(14)	.0631(9)	.2925(28)	4.47(8)	1	8	C	4	1.0000
C2	.1271(12)	.1552(14)	-.0190(22)	4.47(8)	1	8	C	5	1.0000
C3	.1926(11)	.1843(8)	.1068(38)	4.47(8)	1	8	C	6	1.0000
N3	.0724(12)	-.0762(11)	-.2373(27)	4.47(8)	1	8	N	7	1.0000
N4	.1580(8)	-.1522(9)	-.4647(36)	4.47(8)	1	8	N	8	1.0000
C4	.1508(9)	-.1006(14)	-.2597(30)	4.47(8)	1	8	C	9	1.0000
C5	.0305(4)	-.1182(13)	-.4180(35)	4.47(8)	1	8	C	10	1.0000
C6	.0830(13)	-.1680(11)	-.5529(24)	4.47(8)	1	8	C	11	1.0000

Relevant Bond Distances and Angles:

Vector	Length	Optr Cell	Neighbor atom coordinates
Pd_N1	2.115(7)	1 0 0 0	.09844 .07973 .09449
Pd_N1	2.115(7)	-1 0 0 0	-.09844 -.07973 -.09449
Pd_N3	2.130(8)	1 0 0 0	.07243 -.07621 -.23730
Pd_N3	2.130(8)	-1 0 0 0	-.07243 .07621 .23730

Angle Degrees atom 1 loc atom 3 loc

N1_Pd_N1	179.980(0)	1 0 0 0	-1 0 0 0
N1_Pd_N3	90.1(6)	1 0 0 0	1 0 0 0
N1_Pd_N3	89.9(6)	1 0 0 0	-1 0 0 0
N1_Pd_N3	89.9(6)	-1 0 0 0	1 0 0 0
N1_Pd_N3	90.1(6)	-1 0 0 0	-1 0 0 0
N3_Pd_N3	180.000(0)	1 0 0 0	-1 0 0 0

Vector	Length	Optcr Cell	Neighbor atom coordinates
N1_Pd	2.115(7)	1 0 0 0	.00000 .00000 .00000
N1_C1	1.3805(11)	1 0 0 0	.14543 .06306 .29248
N1_C2	1.3800(10)	1 0 0 0	.12712 .15521 -.01900

Angle	Degrees	atom 1 loc	atom 3 loc
Pd_N1_C1	123.4(18)	1 0 0 0	1 0 0 0
Pd_N1_C2	128.6(18)	1 0 0 0	1 0 0 0
C1_N1_C2	108.00(7)	1 0 0 0	1 0 0 0

Vector	Length	Optcr Cell	Neighbor atom coordinates
N2_C1	1.3805(11)	1 0 0 0	.14543 .06306 .29248
N2_C3	1.3810(11)	1 0 0 0	.19260 .18431 .10677

Angle	Degrees	atom 1 loc	atom 3 loc
C1_N2_C3	107.86(11)	1 0 0 0	1 0 0 0

Vector	Length	Optcr Cell	Neighbor atom coordinates
C1_N1	1.3805(11)	1 0 0 0	.09844 .07973 .09449
C1_N2	1.3805(11)	1 0 0 0	.20022 .13125 .30892
C1_C2	2.2332(10)	1 0 0 0	.12712 .15521 -.01900
C1_C3	2.2321(11)	1 0 0 0	.19260 .18431 .10677

Angle	Degrees	atom 1 loc	atom 3 loc
N1_C1_C3	107.9(18)	1 0 0 0	1 0 0 0

Vector	Length	Optcr Cell	Neighbor atom coordinates
C2_N1	1.3800(10)	1 0 0 0	.09844 .07973 .09449
C2_C1	2.2332(10)	1 0 0 0	.14543 .06306 .29248
C2_C3	1.3808(11)	1 0 0 0	.19260 .18431 .10677

Angle	Degrees	atom 1 loc	atom 3 loc
C1_C2_C3	107.9(18)	1 0 0 0	1 0 0 0

Vector	Length	Optcr Cell	Neighbor atom coordinates
C3_N2	1.3810(11)	1 0 0 0	.20022 .13125 .30892
C3_C1	2.2321(11)	1 0 0 0	.14543 .06306 .29248
C3_C2	1.3808(11)	1 0 0 0	.12712 .15521 -.01900

Angle		Degrees	atom 1 loc		atom 3 loc	
C1_C3_C2		107.8(18)	1 0 0 0		1 0 0 0	
Vector	Length	Optr Cell	Neighbor atom coordinates			
N3_Pd	2.130(8)	1 0 0 0	.00000 .00000 .00000			
N3_C4	1.3809(11)	1 0 0 0	.15076 -.10061 -.25974			
N3_C5	1.3808(11)	1 0 0 0	.03048 -.11821 -.41799			
Angle		Degrees	atom 1 loc		atom 3 loc	
Pd_N3_C4		138.6(16)	1 0 0 0		1 0 0 0	
Pd_N3_C5		113.4(16)	1 0 0 0		1 0 0 0	
C4_N3_C5		107.96(8)	1 0 0 0		1 0 0 0	
Vector	Length	Optr Cell	Neighbor atom coordinates			
N4_C4	1.3808(11)	1 0 0 0	.15076 -.10061 -.25974			
N4_C6	1.3816(11)	1 0 0 0	.08298 -.16802 -.55293			
Angle		Degrees	atom 1 loc		atom 3 loc	
C4_N4_C6		107.86(11)	1 0 0 0		1 0 0 0	
Vector	Length	Optr Cell	Neighbor atom coordinates			
C4_N3	1.3809(11)	1 0 0 0	.07243 -.07621 -.23730			
C4_N4	1.3808(11)	1 0 0 0	.15799 -.15224 -.46466			
C4_C5	2.2338(11)	1 0 0 0	.03048 -.11821 -.41799			
C4_C6	2.2329(12)	1 0 0 0	.08298 -.16802 -.55293			
Angle		Degrees	atom 1 loc		atom 3 loc	
N3_C4_C6		107.9(17)	1 0 0 0		1 0 0 0	
Vector	Length	Optr Cell	Neighbor atom coordinates			
C5_N3	1.3808(11)	1 0 0 0	.07243 -.07621 -.23730			
C5_C4	2.2338(11)	1 0 0 0	.15076 -.10061 -.25974			
C5_C6	1.3806(11)	1 0 0 0	.08298 -.16802 -.55293			
Angle		Degrees	atom 1 loc		atom 3 loc	
C4_C5_C6		108.0(17)	1 0 0 0		1 0 0 0	
Vector	Length	Optr Cell	Neighbor atom coordinates			
C6_N4	1.3816(11)	1 0 0 0	.15799 -.15224 -.46466			
C6_C4	2.2329(12)	1 0 0 0	.15076 -.10061 -.25974			
C6_C5	1.3806(11)	1 0 0 0	.03048 -.11821 -.41799			
Angle		Degrees	atom 1 loc		atom 3 loc	
C4_C6_C5		107.9(17)	1 0 0 0		1 0 0 0	

Compound: Bis-imidazole, bis-imidazolate platinum(II)

Crystal Data:

Space group P 2₁/c
 The lattice is centric primitive monoclinic Laue symmetry 2/m
 Multiplicity of a general site is 4
 The unique axis is b
 The symmetry of the point 0,0,0 contains lbar

The equivalent positions are:

(1) X Y Z (2) -X 1/2+Y 1/2-Z

Lattice constants are

a = 5.34033(29) b = 15.6798(9) c = 8.6555(5)

Alpha = 90 Beta = 103.354(4) Gamma = 90

Cell volume = 705.17(7)

Fractional Atomic Coordinates:

Name	X	Y	Z	U _i /U _e *100	Site sym	Mult	Type	Seq	Fractn
Pt	.000000	.000000	.000000	2.77(9)	-1	2	PT	1	1.0000
N1	.2964(35)	.0636(12)	.1597(26)	4.77(9)	1	4	N	2	1.0000
N2	.6282(37)	.1468(11)	.2714(35)	4.77(9)	1	4	N	3	1.0000
C1	.481(6)	.1181(18)	.1282(18)	4.77(9)	1	4	C	4	1.0000
C2	.348(4)	.0512(12)	.3222(31)	4.77(9)	1	4	C	5	1.0000
C3	.535(5)	.1093(16)	.3913(12)	4.77(9)	1	4	C	6	1.0000
N3	.0191(55)	-.1048(13)	.1754(26)	4.77(9)	1	4	N	7	1.0000
N4	-.0760(53)	.2685(7)	.2042(28)	4.77(9)	1	4	N	8	1.0000
C4	-.139(4)	.3170(19)	.3232(27)	4.77(9)	1	4	C	9	1.0000
C5	.130(4)	.3927(14)	.2138(33)	4.77(9)	1	4	C	10	1.0000
C6	.120(5)	.3105(19)	.1548(21)	4.77(9)	1	4	C	11	1.0000

Relevant Bond Distances and Angles:

Vector	Length	Optcr Cell	Neighbor atom coordinates
Pt_N1	2.098(11)	1 0 0 0	.29635 .06360 .15972
Pt_N1	2.098(11)	-1 0 0 0	-.29635 -.06360 -.15972
Pt_N3	2.223(11)	1 0 0 0	.01915 -.10479 .17536
Pt_N3	2.223(11)	-1 0 0 0	-.01915 .10479 -.17536

Angle	Degrees	atom 1 loc	atom 3 loc
N1_Pt_N1	179.960(0)	1 0 0 0	-1 0 0 0
N1_Pt_N3	89.6(8)	1 0 0 0	1 0 0 0
N1_Pt_N3	90.4(8)	1 0 0 0	-1 0 0 0
N1_Pt_N3	90.4(8)	-1 0 0 0	1 0 0 0
N1_Pt_N3	89.6(8)	-1 0 0 0	-1 0 0 0
N3_Pt_N3	180.000(0)	1 0 0 0	-1 0 0 0

Vector	Length	Optr Cell	Neighbor atom coordinates
N1_Pt	2.098(11)	1 0 0 0	.00000 .00000 .00000
N1_C1	1.3808(20)	1 0 0 0	.48139 .11812 .12816
N1_C2	1.3826(21)	1 0 0 0	.34797 .05123 .32217

Angle	Degrees	atom 1 loc	atom 3 loc
Pt_N1_C1	129.0(22)	1 0 0 0	1 0 0 0
Pt_N1_C2	123.1(21)	1 0 0 0	1 0 0 0
C1_N1_C2	107.72(19)	1 0 0 0	1 0 0 0

Vector	Length	Optr Cell	Neighbor atom coordinates
N2_C1	1.3806(19)	1 0 0 0	.48139 .11812 .12816
N2_C3	1.3808(20)	1 0 0 0	.53525 .10929 .39129

Angle	Degrees	atom 1 loc	atom 3 loc
C1_N2_C3	107.94(14)	1 0 0 0	1 0 0 0

Vector	Length	Optr Cell	Neighbor atom coordinates
C1_N1	1.3808(20)	1 0 0 0	.29635 .06360 .15972
C1_N2	1.3806(19)	1 0 0 0	.62816 .14683 .27145
C1_C2	2.2317(20)	1 0 0 0	.34797 .05123 .32217
C1_C3	2.2331(19)	1 0 0 0	.53525 .10929 .39129

Angle	Degrees	atom 1 loc	atom 3 loc
N1_C1_C3	107.9(22)	1 0 0 0	1 0 0 0

Vector	Length	Optr Cell	Neighbor atom coordinates
C2_N1	1.3826(21)	1 0 0 0	.29635 .06360 .15972
C2_C1	2.2317(20)	1 0 0 0	.48139 .11812 .12816
C2_C3	1.3822(21)	1 0 0 0	.53525 .10929 .39129

Angle	Degrees	atom 1 loc	atom 3 loc
C1_C2_C3	107.6(22)	1 0 0 0	1 0 0 0

Vector	Length	Optr Cell	Neighbor atom coordinates
C3_N2	1.3808(20)	1 0 0 0	.62816 .14683 .27145
C3_C1	2.2331(19)	1 0 0 0	.48139 .11812 .12816
C3_C2	1.3822(21)	1 0 0 0	.34797 .05123 .32217

Angle					
C1_C3_C2					
Degrees	107.8(22)				
		atom 1 loc	atom 3 loc		
		1 0 0 0	1 0 0 0		
Vector					
N3_Pt	Length	Optr Cell		Neighbor atom coordinates	
	2.223(11)	1 0 0 0		.00000	.00000
N3_C4	1.3810(20)	2 0-1 0		.13870	-.18297 .17678
N3_C5	1.3813(20)	2 0-1 0		-.12992	-.10730 .28618

Angle					
Pt N3_C4					
Degrees	127.6(23)				
		atom 1 loc	atom 3 loc		
		1 0 0 0	2 0-1 0		
Pt N3_C5	Length	Optr Cell		Neighbor atom coordinates	
	1.3810(20)	2 0-1 0		.13870	-.18297 .17678
C4_N3_C5	1.3813(20)	2 0-1 0		-.12992	-.10730 .28618

Vector					
N4_C4	Length	Optr Cell		Neighbor atom coordinates	
	1.3825(21)	1 0 0 0		-.13870	.31703 .32322
N4_C6	1.3836(22)	1 0 0 0		.11971	.31047 .15482

Angle					
C4_N4_C6					
Degrees	107.38(21)				
		atom 1 loc	atom 3 loc		
		1 0 0 0	1 0 0 0		

Vector					
C4_N3	Length	Optr Cell		Neighbor atom coordinates	
	1.3810(20)	2 0 0 0		-.01915	.39521 .32464
C4_N4	1.3825(21)	1 0 0 0		-.07597	.26850 .20421
C4_C5	2.2337(18)	1 0 0 0		.12992	.39270 .21382
C4_C6	2.2290(21)	1 0 0 0		.11971	.31047 .15482

Angle					
N3_C4_C6					
Degrees	107.7(24)				
		atom 1 loc	atom 3 loc		
		2 0 0 0	1 0 0 0		

Vector					
C5_N3	Length	Optr Cell		Neighbor atom coordinates	
	1.3813(20)	2 0 0 0		-.01915	.39521 .32464
C5_C4	2.2337(18)	1 0 0 0		-.13870	.31703 .32322
C5_C6	1.3831(21)	1 0 0 0		.11971	.31047 .15482

Angle					
C4_C5_C6					
Degrees	107.6(24)				
		atom 1 loc	atom 3 loc		
		2 0 0 0	1 0 0 0		

Vector					
C6_N4	Length	Optr Cell		Neighbor atom coordinates	
	1.3836(22)	1 0 0 0		-.07597	.26850 .20421
C6_C4	2.2290(21)	1 0 0 0		-.13870	.31703 .32322
C6_C5	1.3831(21)	1 0 0 0		.12992	.39270 .21382

Angle					
C4_C6_C5					
Degrees	107.3(24)				
		atom 1 loc	atom 3 loc		
		1 0 0 0	1 0 0 0		