SC-Database
Software version = 5.81 Data version = 4.62
Experiment list contains 686 experiments for
 (no ligands specified)
 2 metals : Pd(IV), Pd++
 (no references specified)
 (no experimental details specified)

****
e- HL Electron (442)
Electron;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd(IV) EMF none 18°C 0.0 U 1924JIa (793) 1
K=42.3(1220mV)
K'=32.9(950mV)
K: PdO3(s)+2H+2e=PdO2(s)+H2O. K': PdO2(s)+2H+2e=PdO(s)+H2O
****
Br- HL Bromide CAS 10035-10-6 (19)
Bromide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd(IV) EMF NaClO4 25°C 0.40M U 1971DUa (2221) 2
K5=3.48
K6=2.64
Medium: HClO4
****
Cl- HL Chloride CAS 7647-01-0 (50)
Chloride;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd(IV) EMF NaClO4 25°C 0.40M U 1971DUa (5441) 3
K5K6=4.22
Medium: HClO4

Pd(IV) sol NaCl 25°C 1.0M U 1930WEa (5442) 4
K(K2PdL6(s)=2K+PdL6)=-5.22
****
e- HL Electron (442)
Electron;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ vlt none 25°C 0.00 U 1971JPa (794) 5
K(Pd + 2e=Pd(s))=30.8(0.91V)

Pd++ EMF oth/un 25°C 4.00M U T 1970IEa (795) 6

K(Pd + 2e=Pd(s))=33.1(979mV)
Medium: HClO4. K=34.8(978mV,10 C), 34.2(979mV,15 C), 33.5(975mV,20 C), 32.5 (978mV,30 C), 31.8(972mV,35 C), 30.9(960mV,40 C)(m units)

Pd++ oth none 25°C 0.0 U 1968GHa (796) 7
K'=16.2 (480mV)
Method:Literature evaluated data. K': Pd(IV)I6+2e=PdI4+2I

Pd++ oth none 25°C 0.0 U 1968GHa (797) 8
K(Pd+2e=Pd(s))=31.1 (920mV)
Method:Literature evaluated data

Pd++ oth none 25°C 0.0 U M 1968GHa (798) 9
K(PdCl4+2e=Pd(s)+4Cl)=19.9
Method:Literature evaluated data. K(PdBr4+2e=Pd(s)+4Br)=16.6(0.49V), K(PdI4+2e=Pd(s)+4I)=6.1(0.18V)

Pd++ EMF NaClO4 25°C 4.87M U I 1968LMb (799) 10
K(Pd+2e=Pd(s))=33.67, 996 mV
Medium: HClO4. I=3.46: K=32.19, 952 mV; I=2.22: K=31.25, 924.4 mV; I=1.06: K=31.11, 920 mV

Pd++ EMF none 25°C 0.0 M H 1967IEa (800) 11
K(Pd+2e=Pd(s))=30.9, 915 mV
By calorimetry, 0.1 M NaI: DH(Pd+3I=Pd(s)+I3-)=-104.1 kJ mol-1

Pd++ EMF oth/un 25°C ? U M 1965BKc (801) 12
K=38.21, 1130 mV (X=Cl)
K=23.40, 692 mV (X=Br)
K=21.13, 625 mV (X=I)
K: Pd(en)2X2+2e=Pd(en)2+2X

Pd++ oth none 25°C 0.0 U 1952LAb (802) 13
K=20(600 mV)
K: Pd(II)Br4+2e=Pd(s)+4Br. From thermodynamic data K(PdO2(s)+H2O+2e=PdO(s)+2OH)=25(730 mV) estimated

---

Pd++ EMF KCl 25°C 1.0M U T 1943TWa (803) 14
K=21.0(621 mV)
Medium: HCl. K: PdCl4+2e=Pd(s)+4Cl. At 15 C: K=21.8(623 mV), 35 C: 20.3(619 mV). In 4 M HClO4: K(Pd(II)+2e=Pd(s))=33.4(987 mV)

Pd++ EMF NaCl 25°C 1.0M U I 1942GSa (804) 15
K=44.0(1301 mV)
K(Pd(IV)Cl6+2e-=Pd(II)Cl4+2Cl. In 1 M HCl: K=43.5(1286 mV). In 1 M KBr: K(PdBr6+2e=PdBr4+2Br)=33.6(994 mV). 1 M KI: K(PdI6+2e=PdI4+2I)=16.3(482 mV)

Pd++ oth KCl 25°C 1.0M U 1930WEa (805) 16
K=-3.62
Medium: HCl. K: Pd(IV)Cl6=Pd(II)Cl4+Cl2(aq). Method:chemical analysis

K(Pd(IV)Cl6+2e=Pd(II)Cl4+2Cl)=43.56(1288 mV) from thermodynamic data

****

Br- HL Bromide CAS 10035-10-6 (19)

Bromide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Pd++	kin	NaClO4	25°C	1.0M	U	M	K(cis-trans-PdL2(H2O)2)=0.78 K2(cis)=4.19 K2(trans)=3.41 K3(cis)=3.37		1973ELa (2222)	17
Medium: HClO4. K3(trans)=4.15. Kn: PdL2(H2O)2+nL										
Pd++	sp	NaClO4	?	1.0M	U		K1=2.23		1973GSc (2223)	18
Pd++	sp	NaClO4	25°C	1.0M	U		K1=5.17 B3=12.7 B4=14.9	B2=9.42	1972ELa (2224)	19
Medium: HClO4										
Pd++	sp	NaClO4	25°C	4.50M	U	M	K(PdCl4+L=PdCl3L+Cl)=1.40 K(PdCl3L+L=PdCl2L2+Cl)=1.06 K(PdCl2L2+L=PdClL3+Cl)=0.72 K(PdClL3+L=PdL4+Cl)=0.27		1972FKa (2225)	20
Medium: LiClO4										
Pd++	cal	NaClO4	25°C	1.0M	U	H			1972RHa (2226)	21
Medium: HClO4. DH(K1)=-21.3 kJ mol-1, DS(K1)=27.2 J K-1 mol-1										
Pd++	ISE	diox/w	25°C	71%	U	TI	B4=19.0		1968GFc (2227)	22
B4=16.2(0%), also B4 for several other % dioxan. At 40 C: B4=18.1(71%) 15.3(0%)										
Pd++	sol	NaClO4	20°C	0.10M	U		K1=6.8		1967GGa (2228)	23
Pd++	cal	oth/un	25°C	0.10M	U	H			1967IWa (2229)	24
Medium:NaBr. DH(B4)=-54.8 kJ mol-1										
Pd++	gl	NaClO4	var	var	U		K(PdBr3OH+Br=PdBr4+OH)=-4.23		1967KPc (2230)	25
19-50 C, I=0.1-1.0										
Pd++	sp	NaCl	25°C	1.0M	U		B4=13.05		1966BSa (2231)	26
Pd++	sp	NaClO4	45°C	1.80M	U	T H	K4=2.16		1966SBb (2232)	27

K4=2.50(10 C),2.30(25 C). DH(K4)=-18.0 kJ mol-1, DS=-14.6 J K-1 mol-1

Pd++ ISE oth/un 25°C var U 1965FKa (2233) 28
B4=14
Medium:KBr var. Also values for B4 at 10-60C assuming same K and 1/RTF as for 25C!

Pd++ sol oth/un 20°C 0.60M U I 1964PBa (2234) 29
B3=11.28
B4=13.42 ?
Kso=-12.54
K(PdL2(s)=PdL2)=-4.4
At I=0.4: Kso=12.96,K=-4.5, K(PdL2(s)+L)=-1.36, B3=11.60, B4=13.40?, K3=3.1, K4=1.8

Pd++ sp NaClO4 25°C 0.50M U 1964SBe (2235) 30
K4=2.20

Pd++ sp NaClO4 20°C 0.80M U K1=4.37 1964SLb (2236) 31
K4=3.50
Medium:0.8(ClO4),0.6 H+. By hypothesis method:K2=4.08, K3=3.79

Pd++ ISE oth/un 19°C var U 1963GKa (2237) 32
B4=16.1

Pd++ oth none 25°C 0.0 U 1952LAb (2238) 33
B4=13.10
Method: from thermodynamic data; I=0 corr.

****

CN- HL Cyanide CAS 74-90-8 (230)
Cyanide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo

---

Pd++ ISE oth/un 25°C ? C 1976HEb (2752) 34
B4=63 (60<B4<65)
K(Pd(CN)2(s)+2CN)=20.8
Kso(Pd(CN)2)=-42

Pd++ sol NaClO4 20°C 0.10M U K1=10.5 1967GGa (2753) 35

Pd++ ISE oth/un 25°C 0.0 U H 1967IWa (2754) 36
B4=42.4
K5=2.9
Medium:0 corr. By calorimetry:DH(B4)=-385.8 kJ mol-1, DS=-485 J K-1 mol-1; DH(K5)=-0.8, DS=33. DH(PdBr4+4L=PdL4+4Br)=-329

Pd++ ISE oth/un 25°C var U T 1965FKa (2755) 37
B4=51.6
K(Pd+2e=Pd(s))=33.4

Medium: KCN var

****

CO3-- H2L Carbonate CAS 465-79-6 (268)
Carbonate;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	NaCl	25°C	0.11M	C	I M	2003CBa (3345)		38

Data for 0.105-1.0 M NaCl + H3BO3. K(PdCl4+HCO3=Pd(CO3)Cl3+H+Cl)=-6.68
K=-6.50 (I=0.305), -6.62 (I=0.505), -6.71 (I=0.705), -6.95 (I=1.005)

****

Cl- HL Chloride CAS 7647-01-0 (50)
Chloride;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	NaCl	25°C	0.11M	C	I M	2003CBa (5443)		39
							K(PdCl3+Cl)=1.08		

Data for 0.105-1.0 M NaCl, pH 3.0-8.5. K(PdCl4+H2O=Pd(OH)Cl3+H+Cl)=-8.72.
K=-8.89 (I=0.305), -8.97 (I=0.505), -8.98 (I=0.705), -8.96 (I=1.005)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	NaCl	25°C	0.50M	C		2000BYa (5444)		40
							*K(PdCl4)=-8.98		

*K: PdCl4+H2O=PdCl3(OH)+H.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sol	KCl	25°C	0.10M	C	TI M	1999VWa (5445)		41
							B4=11.81		
							K(Pd+3Cl+OH)=20.21		

Data for 20 C and I=0.8 m and for 25 C and I=0.1-1.0 m. At I=0, B4=11.29,
K(Pd+3Cl+OH)=20.29.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	NaNO3	37°C	0.16M	C	M	1998ESa (5446)		42
							K(PdAH2O)2+Cl)=3.563		
							K(PdA(H2O)Cl+Cl)=2.28		

A is 1,3-diaminopropane.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaClO4	37°C	0.15M	C	M	1996GTa (5447)		43
							K(PdA(H2O)2+L)=3.65		
							K(PdA(H2O)2+2L)=5.86		
							*K(PdA(H2O)2+L)=-2.68		

A=diaminosuccinate diethylester, EtO2CCH(NH2).CH(NH2)CO2Et
*K: PdA(H2O)2+L=PdA(H2O)(OH)L+H

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sol	NaCl	100°C	1.0M	U	T	1995GAa (5448)		44
							K3=0.30		

Method: solubility of AgCl in Pt solution, 0.03-3.0 m HCl.
At 200 C, K3=1.20, at 300 C, K3=1.36

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	kin	NaClO4	25°C	0.10M	U	M	1993SHa (5449)		45
							Kout(PdABH2O+L)=2.28		

```
                                        Kout(PdACH2O+L)=1.86
A=N,N,N',N'-Tetraethyldiaminoethane, B=Inosine, C=Inosine-5'-monophosphate
-------------------------------------------------------------------------------
Pd++       sp  oth/un 19°C  var  U TI                    1991TJa  (5450)  46
                                        K3=2.60
                                        K4=1.25
19-90 C. Constants at I=0
-------------------------------------------------------------------------------
Pd++       nmr non-aq 24°C 100%  U  IHM                  1982HBa  (5451)  47
                                        K(PdI2+PdL2=2PdIL)=0.79
                                        K(PdBr2+PdL2=2PdBrL)=0.63
                                        K(PdCl2+PdL2=2PdClL)=0.61
Medium: CH2Cl2; Pd as Pd2(bis(diphenylphosphino)methane)2
For iodide complex, DH=-5.0 kJ mol-1, DS=12.6 J K-1 mol-1
-------------------------------------------------------------------------------
Pd++       oth NaClO4 25°C  0.0  M  I     K1=5.08   B2= 8.88  1980KRa  (5452)  48
                                        K3=2.42
                                        K4=0.88
Analysis of literature data using Pitzer coefficients. Data for 0.05 to
2.0 M NaClO4. Equation given for ionic strength dependence.
-------------------------------------------------------------------------------
Pd++       sp  NaClO4 25°C 0.86M U        K1=4.0    B2=7.2    1976YBa  (5453)  49
                                        K3=2.3
When I=0.1 M NaClO4: K1=6.0, K2=4.6, K3=2.5
-------------------------------------------------------------------------------
Pd++       sp  non-aq 20°C 100%  U  I                  1974VOa  (5454)  50
                                        K(Pd2L4+2L=Pd2L6)=6.4
                                        K(Li+Pd2L6)=1.7
Medium: MeCN, LiCl at different concentrations. With Me4NCl, values are:
7.8, 1.5
-------------------------------------------------------------------------------
Pd++       kin NaClO4 25°C  1.0M U    M                1973ELa  (5455)  51
                                        K2(cis)=3.11
                                        K2(trans)=2.79
                                        K3(cis)=2.59
                                        K3(trans)=2.90
Medium: HClO4. K(cis-PdL2(H2O)2=trans-PdL2(H2O)2)=0.32
-------------------------------------------------------------------------------
Pd++       sp  NaClO4   ?   1.0M U                     1973GSc  (5456)  52
                                        K4=1.27
-------------------------------------------------------------------------------
Pd++       sp  non-aq   ?  100%  U    M                1973KFa  (5457)  53
                                        K(PdBr4+L=PdBr3L+Br)=1.24
                                        K(PdBr3L+L=PdBr2L2+Br)=1.84
                                        K(PdBr2L2+L=PdBrL3+Br)=2.50
                                        K(PdBrL3+L=PdL4+Br)=2.39
Medium: MeCN, 1.5 M Bu4N(Cl,Br)
-------------------------------------------------------------------------------
Pd++       sp  NaClO4 25°C  1.0M U        K1=4.47   B2=7.76   1972ELa  (5458)  54
                                        B3=10.2
```

B4=11.5

Medium: HClO4

Pd++ cal NaClO4 25°C 1.0M U H 1972RHa (5459) 55

Medium: HClO4. DH(K1)=-12.7 kJ mol-1, DS=43.1 J K-1 mol-1; DH(K2)=-10.8, DS=26.8; DH(K3)=-10.7, DS=10.0; DH(K4)=-14.2, DS(K4)=-21.8

Pd++ oth non-aq 37°C 100% U M 1971HMb (5460) 56

K(Li2Pd2L6+2LiL=2Li2PdL4)=-1.0

Medium: CH3COOH. Method: vapor phase osmometry

Pd++ vlt NaClO4 25°C 0.20M U 1971JPa (5461) 57

B3=7.94

K4=1.44

Medium: HClO4

Pd++ EMF oth/un 25°C 3.0M U 1971KMh (5462) 58

K3=1.76

K4=2.35

Medium: H2SO4

Pd++ sp NaClO4 ? 1.0M U K1=3.48 B2=6.27 1970RGa (5463) 59

K3=2.35

K4=1.1

Pd++ EMF oth/un ? var U K1=4.7 B2=7.70 1969GKd (5464) 60

K3=2.6

K4=1.6

Pd++ EMF NaClO4 25°C 1.0M U 1969KSc (5465) 61

B4=12.15

Medium: H(ClO4,SO4)

Pd++ ISE diox/w 25°C 72% U TI K1=17.7 1968GFc (5466) 62

Also B4 for several dioxan percentages. At 40 C: B4=16.6(72% dioxan)

Pd++ sp NaClO4 25°C 4.0M U TI 1968LEc (5467) 63

K4=2.00

Medium: LiClO4. K4=1.77(I=3),1.59(I=2),1.43(I=1)

At I=2: K4=1.68(15 C),1.59(25 C),1.51(40 C)

Pd++ ISE NaClO4 25°C 3.40M U I 1968LMb (5468) 64

B4=11.4

Medium: HClO4. By spectrophotometry:K4=1.77(I=3.4), 1.44(I=1.07)

Pd++ con oth/un 25°C dil U 1967CMb (5469) 65

K(Pd(NH3)2L+L)=2.55 ?

Pd++ sol NaClO4 25°C 0.10M U K1=5.1 1967GGa (5470) 66

```
Pd++       cal NaCl   25°C 0.10M U   H                    1967IWa  (5471)  67
DH(B4)=-23.0 kJ mol-1
-------------------------------------------------------------------------------
Pd++       gl  NaClO4 var   var  U                        1967KPc  (5472)  68
                                    K(PdCl3OH+Cl=PdCl4+OH)=-5.7
-------------------------------------------------------------------------------
Pd++       gl  R4N.X  25°C  var  U T                      1967RBc  (5473)  69
                                    K(Pd(NH3)2L+L)=2.33
                                    K(Pd(NH3)3+L)=3.0
Medium:NH4(NO3). Also other constants and values at 30 C by spec.
-------------------------------------------------------------------------------
Pd++       sp  oth/un 25°C  1.0M U T H    K1=4.00   B2=7.49   1966SBb  (5474)  70
                                    B3=9.73
                                    B4=11.11
Med:1.0(NaClO4),0.8 H+.  K4=1.50(10 C), 1.42(25 C), 1.28(45 C). DH(B4)=-11.7
kJ mol-1, DS=-12.1 J K-1 mol-1
-------------------------------------------------------------------------------
Pd++       ISE KCl    25°C  1.0M U                       1965FKa  (5475)  71
                                    B4=11.8
                                    K(Pd+2e=Pd(s))=33.4
also B4 values for 10-60C, assuming same K and 1/RTF as for 25C!
-------------------------------------------------------------------------------
Pd++       sp  oth/un 25°C  0.0  U  I     K1=6.0    B2=10.60  1964BSg  (5476)  72
                                    K3=2.5
                                    K4=2.0
                                    B4=15.1
also B4 for I=0.25 to 1.01 M NaClO4
-------------------------------------------------------------------------------
Pd++       oth oth/un 25°C  1.0M U       K1=3.88   B2=6.94   1964BUa  (5477)  73
                                    K3=2.14
                                    K4=1.34
                                    B4=10.42
K1 by solubility, otheres by EMF, spec,
-------------------------------------------------------------------------------
Pd++       sp  NaClO4 25°C 0.50M U                       1964SBe  (5478)  74
                                    K4=1.35
-------------------------------------------------------------------------------
Pd++       ISE oth/un 19°C  var  U                       1963GKa  (5479)  75
                                    B4=12.2
                                    K(Pd+2e=Pd(s))=33.4
-------------------------------------------------------------------------------
Pd++       sol none   25°C  0.0  U    M                 1962REa  (5480)  76
                                    Ks=-3.02
                                    K(trans-Pd(NH3)2L+L)=2.41
I=0 corr. Ks: Pd(NH3)2L2(s)=Pd(NH3)2L2
-------------------------------------------------------------------------------
Pd++       sp  NaClO4 20°C 0.80M U       K1=4.34   B2=7.88   1961SLc  (5481)  77
                                    K3=2.68
                                    K4=1.68
                                    B4=12.24
```

```
---------------------------------------------------------------------------
Pd++       sp  none   21°C  0.0  U T H    K1=6.2    B2=10.9   1957DBa  (5482)  78
                                          K3=2.5
                                          K4=2.6
DH(K1)=-33 kJ mol-1, DS=4.2 J K-1 mol-1; DH(K2)=-38, DS=-42; DH(K3)=-33, DS=
-59; DH(K4)=-33, DS=-59. 38 C: K1=5.9, K2=4.1, K3=2.2, K4=2.5
---------------------------------------------------------------------------
Pd++       sp  none   25°C  0.0  U T H    K1=6.1    B2=10.7   1956DRa  (5483)  79
                                          K3=2.4
                                          K4=2.6
                                          K5=-2.1
                                          K6=-2.1
DH(K5)=0, DS=-38 J K-1 mol-1; DH(K6)=0, DS=-38
---------------------------------------------------------------------------
Pd++       ISE NaClO4 25°C  4.0M U                       1943TWa  (5484)  80
                                          B4=13.22
***************************************************************************
FClBrI                 HL                       (541)
Halides, comparative (for book data under ligand 80)
---------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
---------------------------------------------------------------------------
Pd++       sol NaClO4 20°C 0.10M U    M                   1967GGd  (7412)  81
                                          K(Pd+Cl)=5.1
                                          K(Pd+Br)=6.8
                                          K(Pd+I)=10.0
                                          K(Pd+CN)=10.5
---------------------------------------------------------------------------
Pd++       sp  oth/un 27°C 0.50M U   HM                  1967HPb  (7413)  82
                                          K(PdACl+I=PdAI+Cl)=1.95
                                          K(PdABr+I=PdAI+Br)=1.48
                                          K(PdABr+SCN)=2.23
A=dien. DH(Cl,I)=-15.5 kJ mol-1, DS=-14.2 j k-1 MOL-1. DH(Br,I)=-10.5,DS=-7;
DH(Br,SCN)=-19.6, DS=-22.6. Also other related data
---------------------------------------------------------------------------
Pd++       sp  NaClO4 25?°C 4.50M U                       1967SNa  (7414)  83
                                          K(PdBr4+I=PdBr3I+Br)=2.75
                                          K(PdBr3I+I)=3.00
                                          K(PdBr2I2+I)=1.70
                                          K(PdBrI3+I=PdI4+Br)=0.80
---------------------------------------------------------------------------
Pd++       sp  oth/un 25°C 1.10M U                       1966BSd  (7415)  84
                                          K(PdCl4+2Br=PdCl2Br2+2Cl)=1.99
                                          K(PdCl2Br2+2Br=PdBr4+2Cl)=-.06
                                          B(PdCl2Br2)=13.11
                                          B(PdCl4)=11.12
---------------------------------------------------------------------------
Pd++       sp  NaClO4 25°C 4.50M U    M                   1966SNc  (7416)  85
                                          K(PdCl4+Br=PdCl3Br+Cl)=1.55
                                          K(PdCl3Br+Br=PdCl2Br2+Cl)=1.09
```

K(PdCl2Br2+Br=PdClBr3+Cl)=0.95
K(PdClBr3+Br=PdBr4+Cl)=0.55

Medium: LiClO4

****

I- HL Iodide CAS 10034-85-2 (20)

Iodide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference		ExptNo
Pd++	kin	NaClO4	25°C	1.00M	U		K1=6.08		1986EOa	(8319)	86
Pd++	sp	NaClO4	25°C	1.0M	U				1977EOb	(8320)	87
							K4=2.56				
							K(2PdL4=Pd2L6+2L)=1.32				
Pd++	sp	NaClO4	25°C	4.50M	U	M			1972SNc	(8321)	88
							K(PdCl4+L=PdCl3L+Cl)=3.95				
							K(PdCl3L=PdCl2L2+Cl)=4.1				
							K(PdCl2L2+L=PdClL3+Cl)=2.8				
							K(PdClL3+L=PdL4+Cl)=1.30				
Medium: LiClO4. Data also for complexes with Br in place of Cl: 2.75, 5.75, 7.45, 8.25. Data for L=Br : 1.55, 2.64, 4.14											
Pd++	sol	NaClO4	20°C	0.10M	U		K1=10.0		1967GGa	(8322)	89
Pd++	ISE	oth/un	25°C	1.0M	U				1965FKa	(8323)	90
							B4=24				
Medium:KI. Also B4 for 10-60C, assuming same K and 1/RTF as for 25C!											
Pd++	sp	NaClO4	20°C	0.80M	U		K1=4.95		1965SLd	(8324)	91
							K4=2.92				
							B4=15.74				
Pd++	ISE	oth/un	19°C	var	U				1963GKa	(8325)	92
							B4=24.9				
Pd++	sol	oth/un	18°C	var	U				1948TAb	(8326)	93
							K(PdL2(s)+2I=PdL4)=-2.8				

****

NH3 L Ammonia CAS 7664-41-7 (414)

Ammonia

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference		ExptNo
Pd++	gl	oth/un	25°C	1.0M	U	H	K1=9.56	B2=18.43	1991NSb	(9192)	94
							K3=7.52				
Medium: H/NH3/NaClO4;											
Pd++	gl	KNO3	25°C	?	M	M	K1=6.06		1988SKa	(9193)	95
							K(PdA+L)=5.36				

A=diethylenetriamine

Pd++ gl NaClO4 21°C 0.10M C M 1984KMe (9194) 96
K(PdGlyGly+L)=6.50
K(PdPheGly+L)=6.53
Data also for many other amines

Pd++ sp none 25°C 0.0 C 1975PJb (9195) 97
K(Pd(phen)+L)=7.45
K(Pd(phen)L+L)=6.3

Pd++ gl NaClO4 25°C 1.0M U K1=9.6 B2=18.50 1968RJa (9196) 98
K3=7.5
K4=6.8

Pd++ ISE oth/un 25°C 0.50M U 1965FKa (9197) 99
B4=29.6
K(Pd+2e=Pd(s))=33.4
Medium: L. Also B4 for 10-60 C but assuming same RT/F as at 25 C

****

NO2- HL Nitrite CAS 7782-77-6 (635)
Nitrite;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo

---

Pd++ ISE oth/un 25°C var U 1965FKa (9401) 100
B4=21
K(Pd+2e=Pd(s))=33.4
Medium: KL var. B4 values 10-60 C, but RT/F at value for 25 C

****

OH- HL Hydroxide (57)
Hydroxide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo

---

Pd++ gl NaNO3 25°C 0.10M C M 2002MSb (11918) 101
*K(PdA(H2O)2)=-5.54
*K(PdA(OH)H2O)=-15.01
K(2PdA(H2O)2=Pd2A2(OH)2+2H)=-7.90. A is N,N'-dimethylethylenediamine.

Pd++ gl NaClO4 25°C 0.10M C 2001BPd (11919) 102
*K(Pd(dien)(H2O))=-7.16
K(2Pd(dien)(H2O)=Pd2(dien)2(OH)2)=-10.56.

Pd++ gl NaNO3 25°C 0.10M C M 2001SHc (11920) 103
*K(Pd(bpy)(H2O)2)=-3.91
*K(Pd(bpy)(OH)H2O)=-8.09
K(2Pd(bpy)=Pd2H-2(bpy)2 =-4.70

Pd++ sol NaClO4 25°C 0.50M C TI K1=11.95 B2=23.20 1999VWa (11921) 104

At I=1.0, B2=23.4, B3=26.2. At I=0.1, B2=23.8. Data for 25-85 C.

Pd++ sp NaClO4 25°C 1.0M C 1998SEb (11922) 105
*K(Pt(H2O)4)=-3.0

Pd++ gl NaClO4 37°C 0.15M C M 1996GTa (11923) 106
*K(PdA(H2O)2)=-5.25
*K(dimer)=-6.55
A=diaminosuccinate diethylester, EtO2CCH(NH2).CH(NH2)CO2Et
*K: PdA(H2O)2=PdA(H2O)(OH)L+H, *K(dimer): 2PdA(H2O)2=(PdA(H2O)2(OH)2)2+2H

Pd++ sol oth/un 25°C var M B2=18.9 1991WOa (11924) 107
B3=20.9

Pd++ gl NaCl 25°C 0.50M C I 1984MBa (11925) 108
*K1=-9.23
*B(4,4)=-28.81
Data for 0.5-3.0 M NaCl. At I=1.0 M, *K1=-9.30, *B(4,4)=-29.10

Pd++ sol NaClO4 17°C 0.10M U K1=11.72 B2=23.57 1970NKb (11926) 109
K3=1.85
K4=1.0
Kso(Pd(OH)2(s))=-28.96

Pd++ sp none 25°C 0.0 M K1=12.4 B2=26.5 1967IEa (11927) 110
By glass electrode: K1=13.0, B2=25.8. By solubility: Ks(PdL2(s)=PdL2)=-2.65

Pd++ sp oth/un 25°C var U 1966WYa (11928) 111
*K1(PdCl2(H2O)2)=-2

Pd++ oth none 25°C 0.0 U 1957ZMa (11929) 112
*Kso(Pd(OH)2)=-2.35
*Kso(PdO)=-3.02
*Kso: K(Pd(OH)2(s)+2H=Pd2+2H2O); *Kso(PdO(s)+2H=Pd2+H2O); method:
combination of thermodynamic data

Pd++ oth none 25°C 0.0 U 1952LAb (11930) 113
Kso(Pd(OH)2)=-31

****

PO4--- H3L Phosphate CAS 7664-38-2 (176)
Phosphate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo

---

Pd++ gl KNO3 25°C ? M M K1=3.10 1988SKa (13301) 114
K(PdA+L)=2.63
A=diethylenetriamine

****

S-- H2L Sulfide CAS 7783-06-4 (705)
Sulfide;

```
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       sol oth/un 200°C  var  U T                    1993GBa (14450) 115
                                        Ks(PdS+H2S)=-7.0
                                        Ks(PdS+2H2S)=-11.2
Constants at I=0. 30-300 C
--------------------------------------------------------------------------------
Pd++       oth none   25°C  0.0  C                     1989DYa (14451) 116
                                        KPd+HS=PdS+H)=43.4
Calculated from literature data, based on K(H+S)=17.0.
--------------------------------------------------------------------------------
Pd++       oth none   25°C    0  U                     1988LIa (14452) 117
                                        Kso(PdS)=-62.1
                                        *Kso(PdS)=-44.8
Derived from thermodynamic data and K(H+S=HS)=17.3.
********************************************************************************
SCN-                   HL    Thiocyanate      CAS 463-56-9  (106)
Thiocyanate;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       sp  NaClO4 30°C 0.10M U  I     B2=16.2        1973JPa (15222) 118
                                        B4=25.2
Medium: HClO4. At I=0,  B2=16.9, B4=25.6
--------------------------------------------------------------------------------
Pd++       sp  oth/un 25°C  1.0M U    M                 1967BSc (15223) 119
                                        B4=28.67
                                        K(PdCl4+L=PdCl3L+Cl)=6.03
                                        K(PdCl3L+L=PdCl2L2+Cl)=4.09
                                        K(PdCl2L2+L=PdClL3+Cl)=3.59
Medium: 1 NaCl,0.1 H+. K(PdClL3+L=PdL4+Cl)=3.03
--------------------------------------------------------------------------------
Pd++       sp  oth/un 25°C  1.0M U                     1966BSd (15224) 120
                                        B(PdBrL3)=25.85
                                        B(PdBr2L2)=22.25
                                        B(PdBr3L)=18.15
                                        B(PdBr4)=13.05
B(PdClL3)=25.19; B4=28.22. Medium: 1 M Na+, 0.1 M H+
--------------------------------------------------------------------------------
Pd++       ISE oth/un 25°C  var  U                     1965FKa (15225) 121
                                        B4=26
                                        K(Pd+2e=Pd(s))=33.4
Medium: KI. Also B4 values 10 to 60 C - doubtful since RT constant
--------------------------------------------------------------------------------
Pd++       ISE oth/un 25°C  dil  U T                   1964GPa (15226) 122
                                        B4=19.46
Kso=-17.8. By spectrophotometry: B2=8.4. By solubility, 20 C: K(PdL2(s)+2L)=
1.63
--------------------------------------------------------------------------------
```

```
Pd++       sol oth/un 20°C  var  U                        1964GPa (15227) 123
                                        Ks(PdI2(s)+L=PdL2L)=-0.47
--------------------------------------------------------------------------------
Pd++       ISE oth/un 19°C  var  U                        1963GKa (15228) 124
                                        B4=27.6
                                        K(Pd+2e=Pd(s))=33.4
********************************************************************************
SO3--                  H2L    Sulfite          CAS 7782-99-2  (801)
Sulfite;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       con oth/un   ?   var  U                        1960EAa (15474) 125
                                        K(PdL2(OH)(H2O)+H)=9
********************************************************************************
SO4--                  H2L    Sulfate          CAS 7664-93-9  (15)
Sulfate;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       sp  NaClO4 25°C  1.0M C                        1998SEb (16469) 126
                                        K(Pd+SO4)=1.28
                                        K(Pd+HSO4)=-0.15
                                        K(PdSO4+H)=-0.40
--------------------------------------------------------------------------------
Pd++       vlt NaClO4 25°C 0.20M U        B2=3.16        1971JPa (16470) 127
Medium:HClO4
********************************************************************************
Se--                   H2L    Selenide           (6335)
Selenide;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       oth none   25°C  0.0  U                        1964BUe (16947) 128
                                        Kso=-73.4
********************************************************************************
CH2O2                   HL    Formic acid      CAS 64-18-6  (37)
Methanoic acid; H.COOH
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       kin NaClO4 25°C 1.00M U   H    K1=3.67        1997SEa (17639) 129
                                        K(Pd+HL=PdL+H)=0.15
DH(Pd+HL=PdL+H)=-9.7 kJ mol-1, DS(Pd+HL=PdL+H)=-29 J K-1 mol-1
--------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C    ?  M    M   K1=2.22        1988SKa (17640) 130
                                        K(PdA+L)=2.14
A=diethylenetriamine
********************************************************************************
CH4N2O                  L    Urea             CAS 57-13-6  (2018)
```

Carbamide, Urea; (H2N)2CO

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	nmr	oth/un	40°C	0.90M	U			1998KKf (17723)	131
							K(Pt(H2O)2en+L)=0.11		

Method: 13C nmr. K is for N-bound ligand. For O-bound urea, K=1.36.
Also data for many other alcohol/H20 mixtures.

****

CH4N2S L Thiourea CAS 62-56-6 (51)
Thiocarbamide, Thiourea; (H2N)2CS

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	?	1.0M	U	M		1966SBb (17848)	132
							K(PdCl2L2+L=PdClL3+Cl)=4.86		
							K(PdBr2L2+L=PdBrL3+Br)=4.65		
							K(PdClL3+L=PdL4+Cl)=4.24		
							K(PdBrL3+L=PdL4+Br)=4.18		

K(Pd(SCN)2L2+L=Pd(SCN)L3+SCN)=2.95; K(Pd(SCN)L3+L=PdL4+SCN)=2.52. I=1 or 0.2

****

CH5N L Methylamine CAS 74-89-5 (155)
Methylamine; CH3.NH2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	C	M		2002MSb (18023)	133
							K(PdA+L)=7.64		
							K(PdA+2L)=13.46		
							K(PdA+B+L)=16.57		

A is N,N'-dimethylethylenediamine, B is 1,1-cyclobutane dicarboxylic acid.

Pd++	gl	NaNO3	25°C	0.10M	U	M		1999SSd (18024)	134
							K(Pd(pn)+L)=6.96		
							K(Pd(pn)+2L)=13.57		

pn is 1,2-diaminopropane. For amine protonation, K1=10.43.

Pd++	gl	KNO3	25°C	0.10M	M	M	K1=7.56	1991SKe (18025)	135
							K(Pd(dien)+L)=4.86		

Also data for complexes with homologous alkylamines.

Pd++	gl	NaClO4	21°C	0.10M	C	M		1984KMe (18026)	136
							K(PdGlyGly+L)=7.18		
							K(PdPheGly+L)=7.31		

Data also for many other amines

****

CH6NO3P H2L AMPA CAS 1066-51-3 (1981)
Aminomethylphosphonic acid; H2N.CH2.PO3H2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo

---
Pd++ gl KNO3 25°C 0.10M C B2=27.51 1997BLc (18228) 137
B(PdH2L2Cl2)=38.76
B(PdHL2Cl2)=35.68
B(PdHLCl2)=24.65
B(PdLCl2)=21.08
B(PdH-2L)=4.73

Pd++ gl KCl 25°C 0.10M U 1996BRa (18229) 138
K(Pd+L+Cl)=21.52
K(Pd+2L)=27.70
K(Pd+L+H+2Cl)=24.66
****
C2H2O4 H2L Oxalic acid CAS 144-62-7 (24)
Ethanedioic acid; (COOH)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ ix NaClO4 18°C 0.20M U K1=8.72 1972NKb (19031) 139
Medium : HClO4

Pd++ oth oth/un 18°C ? U K2=3.55 1972NKb (19032) 140
Method : ion-migration
****
C2H2S4 H2L CAS 82766-65-2 (2965)
Tetrathio-oxalic acid; HSSC.CSSH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp oth/un ? 0.05M U 1957JBa (19170) 141
B(Pd2L)=8.11
****
C2H3N L Cyanomethane CAS 75-05-8 (1399)
Acetonitrile; CH3.CN

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp alc/w 25°C 100% U M 1994PAa (19192) 142
K(Pd3A3CO+L)=-1.0
Medium: MeOH. A=Bis(diphenylphosphino)methane

Pd++ sp NaClO4 25°C 1.00M C T H K1=15.5 B2=17.70 1988HEa (19193) 143
Medium: HClO4. DH(K1)=-8.6 kJ mol-1. DS(K1)=-6 J K-1 mol-1. At 5 C, K1=19.6, K2=1.94; at 15 C, K1=16.7, K2=1.67
****
C2H3N3S L CAS 3179-31-5 (4221)
1,2,4-Triazoline-3-thione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---

Pd++ sp KCl ? 1.00M U 1973RRc (19244) 144
B4=32.4
Medium: HCl
****
C2H4 L Ethylene CAS 74-85-1 (478)
Ethene; H2C:CH2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sol oth/un 25°C 2.00M U M 1972OLa (19428) 145
K(PdCl3+L)=4.79
K(PdBr3+L)=3.64
K(PdI3+L)=1.68
K(Pd(SCN)3+L)=2.00
Medium : MgSO4 K(Pd(NO2)3+L)=1.34

Pd++ sol NaClO4 13°C 2.0M U I 1966PMb (19429) 146
K(PdCl4+L=PdCl3L+Cl)=1.19
K(PdCl3L=PdCl2(H2O)L+Cl)=-1.5
Medium:HClO4. K(PdCl4+L=PdCl2(H2O)L+2Cl)=-0.7. I=3.0: K values: 1.2, -0.7, 0.4. I=4.5(LiClO4+HClO4): K values: 1.21, -0.4, 0.81
****
C2H4O2 HL Acetic acid CAS 64-19-7 (36)
Ethanoic acid; CH3.COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp NaClO4 25°C 1.00M U K1=4.34 1996SEa (20127) 147

Pd++ sp alc/w 25°C 100% U M 1994PAa (20128) 148
K(Pd3A3CO+L)=2.86
Medium: MeOH. A=Bis(diphenylphosphino)methane

Pd++ gl KNO3 25°C ? M M K1=2.73 1988SKa (20129) 149
K(PdA+L)=2.52
A=diethylenetriamine

Pd++ sp NaClO4 25°C 0.92M U K1=4.9 B2=8.0 1976YBa (20130) 150
K3=2.6

Pd++ sp non-aq 25°C 100% U M 1972OMa (20131) 151
K(PdL2+CeL3=CePdL5)=4.8
Medium: CH3COOH
****
C2H4O2S H2L Thioglycolic CAS 68-11-1 (596)
Mercaptoethanoic acid; HS.CH2.COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl NaClO4 25°C 1.00M C B2=47.5 2000SAb (20356) 152

K(Pd+HL)=22.2
K(Pd+2HL)=37.1

****

C2H4O3 HL Glycolic acid CAS 79-14-1 (33)
2-Hydroxyethanoic acid; HO.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	NaClO4	25°C	1.00M	U		K1=3.81	1996SEa (20608)	153

****

C2H5NO L Acetamide CAS 60-35-5 (2886)
Ethanoic acid amide; CH3.CO.NH2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	25°C	.001M	U		K1=4.46	1958MCa (20673)	154

****

C2H5NO2 HL Glycine CAS 56-40-6 (85)
2-Aminoethanoic acid; H2N.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	U	M		1999SSd (21677)	155
							K(Pd(pn)+L)=11.01		

pn is 1,2-diaminopropane. For aminoacid protonation, K1=9.60, B2=11.93.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	37°C	0.16M	M	M		1998ESa (21678)	156
							K(PdA+L)=10.76		

A is 1,3-diaminopropane.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.50M	U			1978LIa (21679)	157
							K(Pd(en)+L)=11.21		
Pd++	gl	NaClO4	20°C	1.00M	C		K1=15.25 B2=27.50	1976AMa (21680)	158
							K(PdL+2Br)=6.47		
Pd++	gl	oth/un	25°C	0.01M	U		K1=9.12 B2=17.55	1949MMa (21681)	159

****

C2H6N2O L Glycinamide CAS 598-41-4 (60)
2-Aminoethanoic acid amide; H2N.CH2.CO.NH2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	U	M		1999SSd (21951)	160
							K(Pd(pn)+L)=8.58		
							K(Pd(pn)+L=PdH-1(pn)L+H)=5.35		

pn is 1,2-diaminopropane. For amine protonation, K1=7.88.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	37°C	0.16M	M	M		1998ESa (21952)	161
							K(PdA+L)=7.41		

K(PdA+L=PdAH-1L+H)=4.20
A is 1,3-diaminopropane.

Pd++ gl KNO3 25°C 0.10M U M 1977LIb (21953) 162
K(Pd(en)+L)=8.64
K(Pd(en)L=PdH-1(en)L+H)=-2.47
****
C2H6OS L DMSO CAS 67-68-5 (329)
Dimethylsulfoxide; (CH3)2.SO

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp oth/un 25°C ? U T H K1=0.954 B2=0.56 1987DMa (22117) 163
DH(K1)=-7.3 kJ mol-1; DS(K1)=-8.4 J K-1 mol-1

Pd++ sp alc/w 25°C 95% U I 1982CCa (22118) 164
K(PdCl4+L=PdLCl3+Cl)=1.8
K(PdLCl3+L=PdL2Cl2+Cl)=-1.6
Medium: 95% MeOH/H2O
****
C2H7NO L Ethanolamine CAS 141-43-5 (1057)
2-Aminoethanol; H2N.CH2.CH2.OH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl NaNO3 25°C 0.10M U M 1999SSd (22415) 165
K(Pd(pn)+L)=7.30
K(Pd(pn)+L=PdH-1(pn)L+H)=1.94
pn is 1,2-diaminopropane. For amine protonation, K1=9.31.

Pd++ gl NaNO3 37°C 0.16M M M 1998ESa (22416) 166
K(PdA+L)=6.81
K(PdA+L=PdAH-1L+H)=1.85
A is 1,3-diaminopropane.

Pd++ gl KNO3 25°C 0.10M M M 1991SKe (22417) 167
K(Pd(dien)+L)=5.29

Pd++ gl KNO3 25°C 0.10M U M 1981LIb (22418) 168
K(Pd(H2O)2A+L=PdLA+2H2O)=7.88
K(Pd(H-1L)A+H)=5.16
A=1,2-diaminoethane
****
C2H8N2 L Ethylenediamine CAS 107-15-7 (23)
1,2-Diaminoethane; H2N.CH2.CH2.NH2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KNO3 25°C 0.20M C M 2001NSa (23218) 169
*B2(PdL(H2O)2)=-15.21

K(2PdL(H2O)2=Pd2(OH)L2+H)=-3.04, K(2PdL(H2O)2=Pd2(OH)L2+2H)=-8.41,
K(3PdL(H2O)2=Pd3(OH)3L3+3H)=-11.80

Pd++ gl NaNO3 25°C 0.10M C M 2001SHc (23219) 170
K(Pd(bpy)(H2O)2+L)=17.08
K(Pd(bpy)(H2O)2+H+L)=20.87

Pd++ gl KNO3 25°C 0.10M M M 1991SKe (23220) 171
K(Pd(dien)+L)=6.70
K(Pd(dien)+H+L)=14.63

Pd++ gl NaClO4 25°C 1.00M C M K1=23.6 B2=42.20 1986ANa (23221) 172
Ternary complex with Br-. Combined pot. and spectrophotometric study

---

Pd++ gl KNO3 23°C 0.20M U 1976LMa (23222) 173
K(2PdL(OH2)2=LPd(OH)2PdL)=8.3

****

C2H8O7P2 H4L HEDPA CAS 2809-21-4 (436)
1-Hydroxyethane-1,1-diphosphonic acid; CH3.C(OH)(PO3H2)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo

---

Pd++ gl KNO3 25°C 0.10M U K1=5.74 1980ZRc (23394) 174
K(Pd+HL)=4.44
K(Pd+H2L)=2.41

****

C3H4N2 L Imidazole CAS 288-32-4 (90)
1,3-Diazole, imidazole; C3H4N2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo

---

Pd++ gl NaNO3 25°C 0.10M C M 2002MSb (23917) 175
K(PdA+L)=7.92
K(PdA+2L)=14.64
K(PdA+B+L)=14.20
A is N,N'-dimethylethylenediamine, B is 1,1-cyclobutane dicarboxylic acid.

Pd++ gl NaNO3 37°C 0.16M M M 1998ESa (23918) 176
K(PdA+L)=7.29
K(PdA+2L)=13.87
A is 1,3-diaminopropane.

Pd++ gl KNO3 25°C ? M M K1=6.40 1988SKa (23919) 177
K(PdA+L)=5.62
A=diethylenetriamine

****

C3H4O4 H2L Malonic acid CAS 141-82-2 (79)
Propanedioic acid; CH2(COOH)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo

```
------------------------------------------------------------------------------
Pd++       gl  NaClO4 37°C 0.15M C    M                 2003TMb (24533) 178
                                        K(Pd(en)+L)=5.40
------------------------------------------------------------------------------
Pd++       kin NaClO4 25°C 1.00M U   H    K1=3.40        1997SEa (24534) 179
                                        K(Pd+HL=PdL+H)=0.8
DH(Pd+HL=PdL+H)=-7.5 kJ mol-1, DS(Pd+HL=PdL+H)=-10 J K-1 mol-1
******************************************************************************
C3H6                    L    Propylene        CAS 115-07-1  (702)
Propene; CH3.CH:CH2
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       sol oth/un 25°C 2.00M U    M                 1972OLa (24755) 180
                                        K(PdCl3+L)=4.97
                                        K(PdBr3+L)=3.72
                                        K(Pd(NO2)3+L)=1.39
                                        K(PdI3+L)=1.70
Medium: MgSO4
******************************************************************************
C3H6O2                  HL    Propionic acid   CAS 79-09-4  (35)
Propanoic acid; CH3.CH2.COOH
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       sp  NaClO4 25°C 1.00M U        K1=4.32        1996SEa (25040) 181
------------------------------------------------------------------------------
Pd++       sp  alc/w  25°C 100%  U    M                 1994PAa (25041) 182
                                        K(Pd3A3CO+L)=3.41
Medium: MeOH. A=Bis(diphenylphosphino)methane
------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C    ?  M    M   K1=2.94        1988SKa (25042) 183
                                        K(PdA+L)=2.60
A=diethylenetriamine
******************************************************************************
C3H6O2S                 HL                    CAS 2444-37-3  (1074)
(Methylthio)ethanoic acid; CH3.S.CH2.COOH
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       gl  NaClO4 25°C 1.00M C        K1=13.2   B2=22.30  2000SAb (25092) 184
------------------------------------------------------------------------------
Pd++       kin oth/un 25°C 1.00M U                          1996SEa (25093) 185
                                        K1eff=4.08
Medium: 1.00 M HClO4.
******************************************************************************
C3H6O3                  HL    L-Lactic acid    CAS 79-33-4  (82)
L-2-Hydroxypropanoic acid; CH3.CH(OH).COOH
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
```

Pd++ kin NaClO4 25°C 1.00M U H K1=3.79 1997SEa (25515) 186
K(Pd+HL=PdL+H)=1.42
DH(Pd+HL=PdL+H)=-6.6 kJ mol-1, DS(Pd+HL=PdL+H)=-18 J K-1 mol-1

Pd++ gl KNO3 25°C ? M M K1=2.02 1988SKa (25516) 187
K(PdA+L)=1.89
A=diethylenetriamine

****

C3H6O3 HL Methoxyacetic CAS 625-45-6 (29)
Methoxyethanoic acid; CH3.O.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	kin	NaClO4	25°C	1.00M	U	H	K1=3.60	1997SEa	(25605) 188
							K(Pd+HL=PdL+H)=1.60		

DH(Pd+HL=PdL+H)=-6.8 kJ mol-1, DS(Pd+HL=PdL+H)=-18 J K-1 mol-1

****

C3H7NO HL CAS 127-06-0 (7906)
Acetoxime;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	non-aq	40°C	100%	C	I M		2001KKa	(25641) 189
							K(cis-Pd(en)(S)2+L)=2.51		
							K(cis-Pd(en)L(S)+L)=1.52		
							K(cis-Pd(A)(S)2+L)=1.59		
							K(cis-Pd(A)L(S)+L)=0.48		

Medium: acetone (S). Also data for D2O/acetone mixtures.
Additional methods: 1H and 13C nmr. A is 3,6-dithia-1,8-octanediol.

****

C3H7NO L DMF CAS 68-12-2 (598)
N,N-Dimethylformamide; HCO.N(CH3)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	alc/w	25°C	100%	U	I M		1994PAa	(25666) 190
							K(Pd3A3CO+L)=-0.27		

Medium: MeOH. A=Bis(diphenylphosphino)methane. In toluene, K=-0.15;
in CH3CN, K=-0.35; in acetone, K=-0.62; in CH2Cl2, K=-0.59

****

C3H7NO2 HL Alanine CAS 56-41-7 (86)
2-Aminopropanoic acid; H2N.CH(CH3).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	U	M		1999SSd	(26239) 191
							K(Pd(pn)+L)=11.42		

pn is 1,2-diaminopropane. For aminoacid protonation, K1=9.69, B2=11.88.

```
Pd++       gl  NaNO3  37°C 0.16M M    M                  1998ESa (26240) 192
                                          K(PdA+L)=10.90
A is 1,3-diaminopropane.
-------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.50M U                       1978LIa (26241) 193
                                          K(Pd(en)+L)=11.22
-------------------------------------------------------------------------------
Pd++       gl  KNO3   20°C  0.5M U        K1=9.98   B2=18.33  1974KHb (26242) 194
*******************************************************************************
C3H7NO2                HL    B-Alanine        CAS 107-95-9  (575)
3-Aminopropanoic acid; H2N.CH2.CH2.COOH
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Pd++       gl  KNO3   20°C  0.5M U      T K1=8.73   B2=15.79  1974KHb (26473) 195
*******************************************************************************
C3H7NO2                HL    Sarcosine        CAS 107-97-1  (87)
N-Methyl-2-aminoethanoic acid; CH3.NH.CH2.COOH
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.50M U                       1978LIa (26606) 196
                                          K(Pd(en)+L)=11.28
*******************************************************************************
C3H7NO2S              H2L    Cysteine         CAS 52-90-4  (96)
2-Amino-3-mercaptopropanoic acid; H2N.CH(CH2.SH)COOH
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Pd++       gl  NaClO4 25°C 1.00M C        B2=51.6        2000SAb (26822) 197
                                          K(Pd+HL)=27.3
                                          K(Pd+2HL)=45.0
*******************************************************************************
C3H7NO3                HL    Serine           CAS 56-45-1  (49)
2-Amino-3-hydroxypropanoic acid; H2N.CH(CH2.OH)COOH
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Pd++       gl  NaNO3  25°C 0.10M U    M                  1999SSd (27167) 198
                                          K(Pd(pn)+L)=12.00
                                          K(Pd(pn)+L=PdH-1(pn)L+H)=3.74
pn is 1,2-diaminopropane. For aminoacid protonation, K1=9.14, B2=11.40.
-------------------------------------------------------------------------------
Pd++       gl  NaNO3  37°C 0.16M M    M                  1998ESa (27168) 199
                                          K(PdA+L)=10.19
                                          K(PdA+L=PdAH-1L+H)=1.90
A is 1,3-diaminopropane.
-------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.10M U    M T                1981LIb (27169) 200
                                          K(PdA(H2O)2+L=PdAL+2H2O)=11.01
```

K(PdA(H-1L)+H)=8.51
A=1,2-diaminoethane
****
C3H8O3S3 H3L Unithiol CAS 74-61-3 (1271)
2,3-Dimercaptopropanesulfonic acid; HS.CH2.CH(SH).CH2.SO3H

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ EMF KNO3 ? 1.00M U B2=21.1 1969SOa (27797) 201
Medium:HNO3
****
C3H9N2O4P H2L CAS 30211-73-5 (7117)
Glycylaminomethylphosphonic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KNO3 25°C 0.10M C B2=26.27 1997BLc (27968) 202
B(PdH-2L2)=10.99
B(PdLCl)=20.54
B(PdH-1LCl)=16.74
B(PdH-2L)=8.67
B(PdH-3L)=-1.51

Pd++ gl KCl 25°C 0.10M U 1996BRa (27969) 203
K(Pd+L+2Cl+H)=24.48
K(Pd+2L)=27.50
K(Pd+L+Cl)=21.35
****
C3H10N2 L CAS 78-90-0 (2905)
1,2-Diaminopropane; CH3.CH(NH2)CH2.NH2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl NaNO3 25°C 0.10M U 1999SSd (28170) 204
*K(PdL)=-5.62
*K(Pd(OH)L)=-9.35
****
C3H10N2 L Propanediamine CAS 109-76-2 (123)
1,3-Diaminopropane; H2N.CH2.CH2.CH2.NH2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl NaNO3 37°C 0.16M M 1998ESa (28319) 205
*K(PdL(H2O)2)=-5.45
*B2(PdL(H2O)2)=-14.58
****
C3H11N3 L CAS 21292-99-6 (2975)
Propane-1,2,3-triamine; H2N.CH2.CH(NH2).CH2.NH2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo

---
Pd++ gl NaNO3 25°C 0.10M C M 1996SEb (28489) 206
*K(PdL)=-5.30
*B2(PdL)=-16.67
K(PdL+Gly)=6.16
K(PdL+Ala)=6.38
K(Gly+H)=9.45; K(Ala+H)=9.59. Also K(PdL+Pro)=6.58, K(PdL+methionine)=6.09, K(PdL+imidazole)=4.22, K(PdL+inosine)=3.96, K(PdL+guanosine)=4.43.

Pd++ gl NaNO3 25°C 0.10M C M 1996SEb (28490) 207
K(PdL+cysteine)=5.79
K(PdL+H+cysteine)=14.45
K(PdL+penicillamine)=6.05
K(PdL+H+penicillamine)=14.64
k(PdL+His)=8.52, K(PdL+H+His)=15.63, K(PdL+histamine)=8.85, K(PdL+H+hist-amine)=15.34. Also K(PdL+A=PdL(H-1A)) for A=Gly-Val (-4.43), Leu-Ala (-3.7)
****
C4H3N2O2F HL 5-Fluorouracil CAS 51-21-8 (4277)
5-Fluoro-2,4(1H,3H)-pyrimidinedione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ ISE KNO3 20°C 0.10M U M 1969GKc (28694) 208
B(PdCl2L2)=21.7
K(PdCl2L+L)=7.82
****
C4H4N2O2 HL Uracil CAS 66-22-8 (412)
2,4-Dihydroxypyrimidone, 2,4-Pyrimidinedione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl NaNO3 25°C 0.10M C M 2002MSb (28863) 209
K(PdA+L)=8.35
K(PdA+2L)=14.88
K(PdA+B+L)=16.18
A is N,N'-dimethylethylenediamine, B is 1,1-cyclobutanedicarboxylic acid.

Pd++ gl NaNO3 25°C 0.10M C M 2001SHc (28864) 210
K(Pd(bpy)(H2O)2+L)=10.96
K(Pd(bpy)(H2O)2+H+L)=13.50
K(Pd(bpy)(H2O)2+2L)=17.17
K(Pd(bpy)(H2O)2+2L+H)=22.15

Pd++ gl NaNO3 25°C 0.10M U M 1999SSd (28865) 211
K(Pd(pn)+L)=8.74
K(Pd(pn)+2L)=15.43
pn is 1,2-diaminopropane. For nucleotide protonation, K1=9.13.

Pd++ gl NaNO3 37°C 0.16M M M 1998ESa (28866) 212
K(PdA+L)=8.08

```
                                        K(PdA+2L)=13.92
A is 1,3-diaminopropane.
-------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.10M U    M                  1981LIa (28867) 213
                                        K(Pd(en)(H2O)2+L)=8.59
                                        K(Pd(en)(H2O)L+L)=6.79
                                        K(Pd(dien)(H2O)+L)=8.01
*************************************************************************
C4H6N2S                HL    Methimazole      CAS 60-56-0  (1824)
N-Methyl-2-mercaptoimidazole; C3H2N2(CH3).SH
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       sp  KNO3   25°C 0.50M C        K1=7.43   B2=11.30  1977LWa (29666) 214
*************************************************************************
C4H6O4                 H2L    Succinic acid    CAS 110-15-6  (112)
1,4-Butanedioic acid; HOOC.CH2.CH2.COOH
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       kin NaClO4 25°C 1.00M U   H    K1=4.03        1997SEa (30025) 215
                                        K(Pd+HL=PdL+H)=0.08
DH(Pd+HL=PdL+H)=10 kJ mol-1, DS(Pd+HL=PdL+H)=36 J K-1 mol-1
*************************************************************************
C4H6O4                 H2L    Me-Malonic Acid  CAS 516-15-2  (816)
Methylpropanedioic acid; HOOC.CH(CH3).COOH
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       gl  NaClO4 37°C 0.15M C    M                  2003TMb (30134) 216
                                        K(Pd(en)+L)=5.68
*************************************************************************
C4H6O5                 H2L    Malic acid       CAS 617-48-1  (393)
2-Hydroxybutane-1,4-dioic acid, Hydroxy-succinic acid; HOOC.CH2.CH(OH).COOH
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       kin NaClO4 25°C 1.00M U   H    K1=3.65        1997SEa (30699) 217
                                        K(Pd+HL=PdL+H)=0.54
DH(Pd+HL=PdL+H)=-3.5 kJ mol-1, DS(Pd+HL=PdL+H)=-1 J K-1 mol-1
*************************************************************************
C4H6O5                 H2L    Diglycolic acid  CAS 110-99-6  (243)
Di(carboxy)methyl ether, 2,2'-Oxydiethanoic acid; HOOC.CH2.O.CH2.COOH
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       kin NaClO4 25°C 1.00M U   H    K1=3.46        1997SEa (30914) 218
                                        K(Pd+HL=PdL+H)=0.64
DH(Pd+HL=PdL+H)=-12 kJ mol-1, DS(Pd+HL=PdL+H)=-27 J K-1 mol-1
*************************************************************************
```

C4H7NO4 H2L Aspartic acid CAS 56-84-8 (21)
Aminobutanedioic acid; H2N.CH(CH2.COOH).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaCl	37°C	0.10M	C		B(Pd(bpy)L)=13.91	2003GZa (31919)	219
Pd++	gl	none	25°C	0.0	U		K(PdL2+H)=4.52 K(PdHL2+H)=3.68 K(PdCl4+2HL=PdH2L2+4Cl)=11.3	1979FWa (31920)	220
Pd++	gl	NaClO4	25°C	0.10M	U		K1=10.44 B2=18.14	1972SSe (31921)	221
Pd++	gl	KNO3	30°C	0.10M	U		K1=10.55 B2=18.25	1971STc (31922)	222
Pd++	oth	KNO3	30°C	0.13M	U		K(Pd+H2L=PdHL+H)=10.45 K(PdHL+H2L=Pd(HL)2+H)=7.76	1971TKe (31923)	223

C4H7NO4 H2L IDA CAS 142-73-4 (118)
Iminodiethanoic acid; HN(CH2.COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaClO4	20°C	1.00M	C	M	K1=17.5 B2=26.80 K(Pd+HL)=9.0 K(PdL+2Br)=3.83	1976AMa (32336)	224
Pd++	gl	KCl	25°C	0.1M	U		K1=9.62 B2=14.87	1975CGc (32337)	225
Pd++	EMF	KCl	25°C	0.10M	U		K1=9.62 B2=14.87	1975VCa (32338)	226

C4H8 L But-1-ene CAS 106-98-9 (2985)
But-1-ene; CH2:CH.CH2.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sol	NaClO4	15°C	5.0M	U	I M	K(PdCl4+L=PdCl3L+Cl)=1.05	1966PMb (32458)	227

Medium: LiClO4+HClO4. K=1.14(I=2), 1.13(I=3), 1.13(I=4)
K(PdCl4+L=PdCl2(H2O)L+2Cl)=-0.5(I=2), 0.1(I=3), 0.65(I=4), 0.95(I=5)

C4H8N2O2 H2L Dimethylglyoxim CAS 95-45-4 (2032)
2,3-Butanedione dioxime, Dimethylglyoxime; CH3.(C:NOH).(C:NOH).CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	dis	NaClO4	25°C	1.0M	U		B2=34.1	1963BDa (32547)	228

```
                                        K(PdL2+OH)=5.50
--------------------------------------------------------------------------------
Pd++       sol oth/un 25°C    ?  U                        1958BBb (32548) 229
                                        Ks2=-3.30
********************************************************************************
C4H8N2O3               HL    Asparagine       CAS 70-47-3  (17)
2-Aminobutanedioic acid 4-amide; H2N.CH(CH2.CO.NH2).COOH
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  NaNO3  25°C 0.10M U    M                   1999SSd (32720) 230
                                        K(Pd(pn)+L)=12.79
                                        K(Pd(pn)+L=PdH-1(pn)L+H)=6.38
pn is 1,2-diaminopropane. For amide protonation, K1=8.55.
--------------------------------------------------------------------------------
Pd++       gl  NaNO3  37°C 0.16M M    M                   1998ESa (32721) 231
                                        K(PdA+L)=10.19
                                        K(PdAH-1L+H)=3.33
A is 1,3-diaminopropane.
--------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.50M U    M                   1977LIa (32722) 232
                                        K(Pd(en)+L)=10.46
                                        K(Pd(en)H-1L+H)=6.46
--------------------------------------------------------------------------------
Pd++       gl  NaClO4 25°C 3.00M C                        1974GWa (32723) 233
                                        B(PdHL)=12.11
                                        B(PdH-1L)=9.1
                                        B(PdHLCl)=18.29
                                        B(PdH-1LCl)=17.0
********************************************************************************
C4H8N2O3               HL    Gly-Gly          CAS 556-50-3  (54)
Glycyl-glycine; H2N.CH2.CO.NH.CH2.COOH
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M C                        1999AJa (33047) 234
                                        B(PdLCl)=18.08
                                        B(PdH-1LCl)=15.56
                                        B(PdH-2L)=4.89
                                        B(PdH-1L2)=19.30
Medium: 0.1 M KNO3, 0.1 M KCl.  B(PdH-2L2)=13.90; B(PdH-1L)=13.57.
--------------------------------------------------------------------------------
Pd++       gl  NaNO3  25°C 0.10M U    M                   1999SSd (33048) 235
                                        K(Pd(pn)+L)=9.41
                                        K(Pd(pn)+L=PdH-1(pn)L+H)=6.02
pn is 1,2-diaminopropane. For aminoacid protonation, K1=7.97.
--------------------------------------------------------------------------------
Pd++       gl  NaNO3  37°C 0.16M M    M                   1998ESa (33049) 236
                                        K(PdA+L)=7.53
                                        K(PdA+L=PdAH-1L+H)=2.88
```

A is 1,3-diaminopropane.

Pd++ gl KNO3 25°C 0.10M U M 1977LIb (33050) 237
K(Pd(en)+L)=9.60
K(Pd(en)L=PdH-1(en)L+H)=-3.76

****

C4H8OS L (1882)
Tetramethylenesulfoxide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	alc/w	25°C	95%	U			1982CCa (33192)	238
							K(PdCl4+L=PdLCl3+Cl)=1.7		

****

C4H8O2 HL CAS 107-92-6 (1118)
n-Butanoic acid; CH3.CH2.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	kin	NaClO4	25°C	1.00M	U	H	K1=4.38	1997SEa (33346)	239
							K(Pd+HL=PdL+H)=-0.29		

DH(Pd+HL=PdL+H)=-14.6 kJ mol-1, DS(Pd+HL=PdL+H)=-55 J K-1 mol-1

****

C4H8O3 HL CAS 594-61-6 (81)
2-Hydroxy-2-methylpropanoic acid; (CH3)2C(OH).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	kin	NaClO4	25°C	1.00M	U	H	K1=4.05	1997SEa (33504)	240
							K(Pd+HL=PdL+H)=1.88		

DH(Pd+HL=PdL+H)=-8.1 kJ mol-1, DS(Pd+HL=PdL+H)=-21 J K-1 mol-1

****

C4H9NO L CAS 127-19-5 (477)
N,N-Dimethylacetamide; CH3.CO.N(CH3)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	alc/w	25°C	100%	U	M		1994PAa (33767)	241
							K(Pd3A3CO+L)=-1.15		

Medium: MeOH. A=Bis(diphenylphosphino)methane

****

C4H9NO2 L CAS 623-33-6 (3011)
Glycine ethyl ester; H2N.CH2.CO.OCH2CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.20M	M	M	K1=6.01	1987SKb (34002)	242
							K(Pd(dien)+L)=2.81		

Pd++ gl KNO3 25°C 0.50M U 1983LIb (34003) 243

```
                                        K(Pd(en)+L)=7.12
**************************************************************************
C4H9NO2                HL    Dimethylglycine  CAS 1118-68-9  (88)
N,N-Dimethyl-2-aminoethanoic acid; (CH3)2N.CH2.COOH
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.50M U                        1978LIa (34031) 244
                                        K(Pd(en)+L)=11.02
**************************************************************************
C4H9NO2S               HL    Methylcysteine   CAS 1187-84-4  (84)
2-Amino-3-methylmercaptopropanoic acid; H2N.CH(CH2.S.CH3)COOH
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       gl  NaClO4 25°C 0.10M M                        2002BSa (34101) 245
                                        *K(PdL)=-4.13
                                        K(2PdL=Pd2H-1L2)=-0.01
                                        *B2(PdL)=-15.77
--------------------------------------------------------------------------
Pd++       gl  NaClO4 25°C 1.00M C        K1=19.9   B2=36.30  2000SAb (34102) 246
--------------------------------------------------------------------------
Pd++       gl  NaNO3  25°C 0.10M U    M                   1999SSd (34103) 247
                                        K(Pd(pn)+L)=10.83
pn is 1,2-diaminopropane. For aminoacid protonation, K1=8.65.
--------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.50M U                        1978LIa (34104) 248
                                        K(Pd(en)+L)=9.38
                                        K(Pd(en)+HL)=1.18
**************************************************************************
C4H9NO3                HL    Threonine        CAS 72-19-5  (48)
2-Amino-3-hydroxybutanoic acid; H2N.CH(CH(OH).CH3)COOH
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       gl  NaNO3  25°C 0.10M U    M                   1999SSd (34319) 249
                                        K(Pd(pn)+L)=11.76
                                        K(Pd(pn)+L=PdH-1(pn)L+H)=3.83
pn is 1,2-diaminopropane. For aminoacid protonation, K1=9.06, B2=11.03.
--------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.10M U    M T                 1981LIb (34320) 250
                                        K(PdA(H2O)2+L=PdAL+2H2O)=10.96
                                        K(PdA(H-1L)+H)=8.05
A=1,2-diaminoethane
**************************************************************************
C4H9NO3                HL    Homoserine       CAS 1927-25-9  (578)
2-Amino-4-hydroxybutanoic acid; HO.CH2.CH2.CH(NH2).COOH
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
```

Pd++ gl KNO3 25°C 0.10M U M 1981LIb (34357) 251
K(PdA(H2O)2+L=PdAL+2H2O)=11.09
K(PdA(H-1L)+H)=9.60
A=1,2-diaminoethane
****
C4H9NS L CAS 123-90-0 (3777)
Thiomorpholine, tetrahydro-4H-1,4-thiazine, thiamorpholine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ kin oth/un 25°C 1.00M U 1996SEa (34405) 252
K1eff=4.30
Medium: 1.00 M HClO4.
****
C4H10N2 L CAS 56123-06-9 (8023)
1,3-Diamino-2-methylenepropane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KNO3 25°C 0.50M U K1=13.64 B2=25.27 1975HSb (34490) 253
****
C4H10OS L CAS 110-77-0 (3516)
Ethyl-2-hydroxyethyl sulfide, 2-(ethylthio)ethanol; CH3CH2SCH2CH2OH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ kin oth/un 25°C 1.00M U 1996SEa (34661) 254
K1eff=4.45
Medium: 1.00 M HClO4.
****
C4H10O2S L CAS 111-48-8 (4275)
3-Thiapentan-1,5-diol; HO.CH2.CH2.S.CH2.CH2.OH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ kin oth/un 25°C 1.00M U 1996SEa (34687) 255
K1eff=4.34
Medium: 1.00 M HClO4.
****
C4H11N L Diethylamine CAS 109-89-7 (1331)
Diethylamine, 3-azapentane; (C2H5)2NH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp non-aq 25°C 100% U 1994CAa (34820) 256
K(PdAB+2L=PdAL2+B)=3.14
A:C3H5 (n(3)-allyl); B:N,N'-di(4-methoxyphenyl)-1,2-diaminoethane.
Additional data for other allyl and amino derivatives.
****
C4H12N2 L Dimeen CAS 110-70-3 (125)

N,N'-Dimethyl-1,2-diaminoethane; CH3.NH.CH2.CH2.NH.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	C			2001MSb (35422)	257
							*K(PdL(H2O)2)=-5.54		
							*K(PdL(OH)H2O)=-9.47		
							K(2PdL=Pd2H-2L2+2H)=-7.90		
Pd++	gl	NaNO3	25°C	0.10M	C	M		2001MSb (35423)	258
							K(PdL+gly)=11.79		
							K(PdL+ala)=10.89		
							K(PdL+pro)=11.14		
							K(PdL+val)=11.59		
Also data for phe, met, imidazole, ser, his, histamine, orn, lys, asp and glu. Amino acid protonation constants also reported.									
Pd++	gl	NaNO3	25°C	0.10M	C	M		2001MSb (35424)	259
							K(PdL+A)=16.31		
							K(PdL+B)=15.12		
							K(PdL+C)=16.31		
							K(PdL+D)=7.64		
K(PdL+E)=6.46. HA=mercaptoethylamine, H3B=glutathione, H2C=cysteine, D=methylamine, E=ethanolamine. Protonation constants also reported.									
Pd++	gl	NaNO3	25°C	0.10M	C	M		2001MSb (35425)	260
							K(PdL+A)=6.38		
							K(PdL+B)=6.28		
							K(PdL+C)=4.35		
							K(PdL+D)=4.09		
Acids: H2A=oxalic, H2B=malonic, H2C=succinic, H2D=adipic. Also data for 1,1-cyclobutane dicarboxylic & fumaric. Protonation constants reported.									
Pd++	gl	NaNO3	25°C	0.10M	C	M		2001MSb (35426)	261
							K(PdL+A)=8.70		
							K(PdL+B)=8.35		
							K(PdL+C)=8.56		
							K(PdL+D)=8.75		
HA=uridine, HB=uracil, HC=thymine, HD=thymidine. Also data for inosine, IMP and adenine. Protonation constants are reported.									
Pd++	gl	NaNO3	25°C	0.10M	C	M		2001MSb (35427)	262
							K(PdL+A)=7.40		
							K(PdL+B)=10.73		
							K(PdL+C)=12.31		
A=glycinamide, HB=glutamine, HC=aspargine. Protonation constants are reported.									
Pd++	gl	NaNO3	25°C	0.10M	C	M		2001MSb (35428)	263
							K(PdL+A)=7.75		

K(PdL+B)=7.63
K(PdL+C)=8.36
HA=glycylglycine, HB=glycylalanine, HC=glycylleucine.
Protonation constants are reported.
****
C4H13N3 L Dien CAS 111-40-0 (584)
1,4,7-Triazaheptane, 2,2'Iminobis(ethylamine), diethylenetriamine;
NH2.(CH2)2.NH.(CH2)2.NH2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KNO3 25°C ? M M 1988SKa (35805) 264
B(PdH-1L)=-8.68
B(PdL(Butyrate))=2.58
B(PdL(pyridine))=4.04

Pd++ gl NaClO4 25°C 1.00M C M K1=32.6 B2=40.40 1986ANa (35806) 265
Ternary complexes with Cl- and Br-. A combined pH-metric and spec. study.

Pd++ gl NaClO4 25°C 0.50M C I 1981GMf (35807) 266
*K(PdL)=-7.589
K(PdL+PdLOH=Pd2L2OH)=2.19
In 0.5 NaNO3: *K(PdL)=-7.543, K(PdL+PdLOH)=2.10

Pd++ gl NaNO3 25°C 1.00M U M K1=34 1969RJa (35808) 267
K(PdL+NH3)=6.9
****
C5H5N L Pyridine CAS 110-86-1 (31)
Pyridine, Azine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp non-aq 25°C 100% U 1994CVa (36663) 268
K(PdAB+2L=PdAL2+B)=1.09
K(PdAC+2L=PdAL2+C)=-1.39
Medium: CHCl3. A:n3-allyl; B:4-MeOC6H4.N=CH.CH=N.C6H4OMe; C:4-MeOC6H4.N=
C(Me).C(Me)=N.C6H4OMe. Also data for 4-substituted pyridines.

Pd++ sp NaClO4 25°C 1.0M U I M K1=8.4 B2=16.10 1986AHb (36664) 269
K3=6.6
K4=5.9
Ternary complexes with 2,2'-bipyridine and 1,10-phenanthroline.
In 0.1M NaCH3SO3, K1=8.5, K2=7.5, K3=6.3, K4=5.7.

Pd++ sp NaClO4 25°C 1.0M U M 1984ETa (36665) 270
K(Pd(en)Cl2+L=PdenLCl+Cl)=4.31
K(Pd(en)LCl+L=PdenL2+Cl)=3.15

Pd++ sp none 25°C 0.0 C 1975PJb (36666) 271
K(Pd(phen)+L)=7.02

K(Pd(phen)L+L)=6.18

****

C5H5N5 L Adenine CAS 73-24-5 (237)
6-Aminopurine; H2N.C5H3N4

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	C	M		2001SHc (36975)	272
							K(Pd(bpy)(H2O)2+L)=11.95		
							K(Pd(bpy)(H2O)2+H+L)=15.97		
							K(Pd(bpy)(H2O)2+2L)=16.59		
							K(Pd(bpy)(H2O)2+2L+H)=25.76		
K(Pd(bpy)(H2O)2+2L+2H)=30.25.									
Pd++	gl	NaNO3	25°C	0.10M	U	M		1999SSd (36976)	273
							K(Pd(pn)+L)=11.14		
pn is 1,2-diaminopropane. For nucleotide protonation, K1=9.59, B2=13.77.									
Pd++	gl	NaNO3	37°C	0.16M	M	M		1998ESa (36977)	274
							K(PdA+L)=10.83		
							K(PdA+2L)=14.62		
A is 1,3-diaminopropane.									

****

C5H6N2O2 HL 1-Methyluracil CAS 615-77-0 (7923)
1-Methyl-2,4(1H,3H)-pyrimidinedione;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.20M	C	M		2003NFa (37222)	275
							K(PdA+L)=9.26		
A is bis-((2-pyridyl)methyl)amine									
Pd++	gl	KNO3	25°C	0.20M	C	M		2001NSa (37223)	276
							K(Pd(en)+L)=9.07		
							K(Pd(en)+2L)=14.88		
							*K(Pd(en)(H2O)L)=-8.53		
K(Pd(en)(H2O)+L=Pd(en)(OH)L+H)=0.54,									
K(2Pd(en)(H2O)2+2L=Pd2(en)2(OH)L2+H)=12.58									
Pd++	gl	KNO3	25°C	0.20M	C	M		2001NSa (37224)	277
							K(Pd(pic)+L)=9.57		
							K(Pd(pic)+2L)=15.73		
							*K(Pd(pic)(H2O)L)=-7.73		
K(Pd(pic)(H2O)+L=Pd(pic)(OH)L+H)=1.84,									
K(2Pd(pic)(H2O)2+2L=Pd2(pic)2(OH)L2+H)=14.58. Hpic=picric acid.									
Pd++	gl	KNO3	25°C	0.20M	C		K1=7.51	2000NFa (37225)	278

****

C5H6N2O2 HL Thymine CAS 65-71-4 (413)
2,4-Dihydroxy-5-methylpyrimidine; C4HN2(CH3)(OH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	C	M	K(PdA+L)=8.56 K(PdA+2L)=15.14 K(PdA+B+L)=15.71	2002MSb (37282)	279

A is N,N'-dimethylethylenediamine, B is 1,1-cyclobutanedicarboxylic acid.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	U	M	K(Pd(pn)+L)=8.90 K(Pd(pn)+2L)=15.80	1999SSd (37283)	280

pn is 1,2-diaminopropane. For nucleotide protonation, K1=9.59.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	37°C	0.16M	M	M	K(PdA+L)=8.37 K(PdA+2L)=14.60	1998ESa (37284)	281

A is 1,3-diaminopropane.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.20M	C		K(PdACl+L=PdAL+Cl)=6.97	1997WKa (37285)	282

PdA is [PdH-1(gly-met)].

****

C5H7N3O HL 1-MeCytosine CAS 1122-47-0 (2268)
1-Methyl-4-aminopyrimidin-2-one;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.20M	C	M	K(PdA+L)=5.84 K(2PdA+L=Pd2A2H-1L+H)=1.76	2003NFa (37588)	283

A is bis-((2-pyridyl)methyl)amine

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.20M	C	M	K(Pd(en)+L)=6.13 K(Pd(en)+2L)=11.44 *K(Pd(en)(H2O)L)=-5.69	2001NSa (37589)	284

K(Pd(en)(H2O)+L=Pd(en)(OH)L+H)=0.44,
K(2Pd(en)(H2O)2+2L=Pd2(en)2(OH)L2+H)=10.41

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.20M	C	M	K(Pd(pic)+L)=8.07 K(Pd(pic)+2L)=13.35 *K(Pd(pic)(H2O)L)=-5.22	2001NSa (37590)	285

K(Pd(pic)(H2O)+L=Pd(pic)(OH)L+H)=2.85,
K(2Pd(pic)(H2O)2+2L=Pd2(pic)2(OH)L2+H)=14.06. Hpic=picric acid.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	cal	KNO3	25°C	0.20M	C	HM		2000NFa (37591)	286

DH(Pd(dien)+L)=-38.5 kJ mol-1; DH(Pd(gly-ala)+L)=-33.1,
DH(Pd(gly-met)+L)=-32.8.

```
--------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M C                      1997WKa (37592) 287
                                        K(PdACl+L=PdAL+Cl)=5.04
PdA is [PdH-1(gly-Met)].
********************************************************************************
C5H8N2OS             H2L                        (6682)
5,5-Dimethyl-2-thioxoimidazolidin-4-one;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  NaCl   25°C 0.10M C        B2=22.96       1993CCa (37688) 288
                                        B(PdH2L2)=44.10
                                        B(PdHL2)=34.58
                                        B(Pd2HL2)=45.46
                                        B(Pd2L2)=38.31
B(Pd2H-1L2)=28.34
********************************************************************************
C5H8O2                HL    Acetylacetone    CAS 123-54-6  (164)
Pentane-2,4-dione; CH3.CO.CH2.CO.CH3
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  oth/un 20°C  0.0  U T H    K1=16.7        1957DBa (38056) 289
DH(K1)=-75 kJ mol-1, DS=63. 30 C: K1=16.2, K2=10.9; 40 C: K1=15.4, K2=10.5
--------------------------------------------------------------------------------
Pd++       gl  diox/w 25°C  50%  U        K1=8.71   B2=16.84  1949MMa (38057) 290
********************************************************************************
C5H8O4                H2L                        CAS 595-46-0  (1144)
Dimethylmalonic acid; HOOC.C(CH3)2.COOH
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  NaClO4 37°C 0.15M C    M                   2003TMb (38216) 291
                                        K(Pd(en)+L)=5.22
********************************************************************************
C5H9NO2               HL    Proline          CAS 147-85-3  (44)
Pyrrolidine-2-carboxylic acid; C4H8N.COOH
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  NaNO3  25°C 0.10M U    M                   1999SSd (38634) 292
                                        K(Pd(pn)+L)=11.55
pn is 1,2-diaminopropane. For aminoacid protonation, K1=10.52, B2=12.03.
--------------------------------------------------------------------------------
Pd++       gl  NaNO3  37°C 0.16M M    M                   1998ESa (38635) 293
                                        K(PdA+L)=10.48
A is 1,3-diaminopropane.
--------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.50M U                        1978LIa (38636) 294
                                        K(Pd(en)+L)=12.16
```

```
------------------------------------------------------------------------------
Pd++       gl  KNO3   20°C  0.5M U        K1=10.26  B2=19.10  1974KHb (38637) 295
******************************************************************************
C5H9NO3                HL    Hydroxyproline   CAS 51-35-4  (416)
4-Hydroxy-2-pyrrolidinecarboxylic acid; C4H7N(OH)(COOH)
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.10M U    M                  1981LIb (38746) 296
                                       K(PdA(H2O)2+L=PdAL+2H2O)=11.47
                                       K(PdA(H-1L)+H)=10.82
A=1,2-diaminoethane
------------------------------------------------------------------------------
Pd++       gl  KNO3   20°C  0.5M U        K1=9.88   B2=19.45  1974KHb (38747) 297
******************************************************************************
C5H9NO4               H2L    Glutamic acid    CAS 56-86-0  (22)
2-Aminopentanedioic acid; H2N.CH(CH2.CH2.COOH)COOH
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       gl  KCl    25°C  0.1M U        B2=38.0        2004AEa (39116) 298
                                       K(Pd+HL)=46.7
                                       K(Pd+2H2L+2Cl)=54.2
                                       K(Pd+2L+OH)=30.1
                                       K(P2d+L+2Cl)=41.9
------------------------------------------------------------------------------
Pd++       gl  none   25°C  0.0  U                    1979FWa (39117) 299
                                       K(PdL2+H)=4.76
                                       K(PdHL2+H)=4.06
                                       K(PdCl4+2HL=PdH2L2+4Cl)=10.0
------------------------------------------------------------------------------
Pd++       gl  NaClO4 25°C 0.10M U        K1=10.38  B2=17.84  1972SSe (39118) 300
******************************************************************************
C5H9NO4               H2L    MIDA             CAS 4408-64-4  (190)
N-Methyliminodiethanoic acid; CH3.N(CH2.COOH)2
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       sp  KCl    20°C 0.10M U        B2=24.88       1987KUa (39277) 301
******************************************************************************
C5H9NO4S              H2L                      (1736)
3-(Carboxymethyl)thio-L-alanine; HOOC.CH2.S.CH2.CH(NH2)COOH
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       kin NaClO4 25°C  1.0M U                    1998VTa (39312) 302
                                       K(Pd+HL=PdL+H)=1.82
                                       K(Pd+H2L=PdHL+H)=2.43
******************************************************************************
C5H9N3                  L    Histamine        CAS 51-45-6  (103)
```

4(5)-(2'-Aminoethyl)imidazole; C3H3N2.CH2.CH2.NH2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	U	M	K(Pd(pn)+L)=13.22	1999SSd (39543)	303

pn is 1,2-diaminopropane. For amine protonation, K1=9.59, B2=15.65.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	37°C	0.16M	M	M	K(PdA+L)=12.56	1998ESa (39544)	304

A is 1,3-diaminopropane.

****

C5H10N2O3 HL Glutamine CAS 56-85-9 (18)

2-Aminopentanedioic acid 5-amide; H2N.CH(CH2.CH2.CO.NH2)COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	U	M	K(Pd(pn)+L)=11.02 K(Pd(pn)+L=PdH-1(pn)L+H)=2.12	1999SSd (39831)	305

pn is 1,2-diaminopropane. For amide protonation, K1=8.98.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	37°C	0.16M	M	M	K(PdA+L)=9.29 K(PdA+L=PdAH-1L+H)=-0.43	1998ESa (39832)	306

A is 1,3-diaminopropane.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KCl	25°C	0.50M	U	M	K(Pd(en)+L)=10.8 *K(Pd(en)L)=-9.03	1977LIa (39833)	307

****

C5H10N2O3 HL Ala-Gly CAS 687-69-4 (55)

Alanyl-glycine; H2N.CH(CH3).CO.NH.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.20M	C		B(PdLCl)=17.96 B(PdH-1LCl)=15.09 B(PdH-2L)=4.38 B(PdH-1L2)=18.70	1999AJa (39893)	308

Medium: 0.1 M KNO3, 0.1 M KCl. B(PdH-2L2)=13.37; B(PdH-1L)=13.10.

****

C5H10N2O3 HL Gly-Ala CAS 3695-73-6 (56)

Glycyl-alanine; H2N.CH2.CO.NH.CH(CH3).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.20M	C		B(PdLCl)=18.00	1999AJa (40005)	309

B(PdH-1LCl)=16.01
B(PdH-2L)=4.80
B(PdH-1L2)=19.80
Medium: 0.1 M KNO3, 0.1 M KCl. B(PdH-1L)=14.02.

Pd++ gl NaNO3 25°C 0.10M U M 1999SSd (40006) 310
K(Pd(pn)+L)=8.17
K(Pd(pn)+L=PdH-1(pn)L+H)=3.69
pn is 1,2-diaminopropane. For aminoacid protonation, K1=8.04.
****
C5H10N2O3 HL Gly-b-Ala CAS 7536-21-2 (9057)
Glycyl-beta-alanine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl oth/un 25°C 0.20M C K1=17.11 2003AMb (40010) 311
K(PdH-1L)=14.93
K(PdH-2L)=6.00
K(PdH-1L2)=20.60
Method: competition with chloride (0.1 M). Medium: 0.10 M KNO3/0.10 M KCl.
****
C5H10N2O3 HL B-Ala-Gly CAS 2672-88-0 (4323)
beta-Alanylglycine; H2N.CH2.CH2.CO.NH.CH2.COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl oth/un 25°C 0.20M C K1=14.12 2003AMb (40051) 312
K(PdH-1L)=11.09
K(PdH-2L)=2.38
K(PdH-1L2)=17.43
Method: competition with chloride (0.1 M). Medium: 0.10 M KNO3/0.10 M KCl.
****
C5H10N4O3 L CAS 54376-69-1 (8335)
N,N'-Carbonylbis(2-aminoacetamide);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl NaClO4 25°C 0.10M U TIH K1=10.75 B2=17.25 1980SAc (40137) 313
Data for 0.075-0.15 M. At I=0, K1=11.15, K2=6.70. Also data for 30 C.
DH and DS values.
****
C5H10OS2 HL CAS 110-50-9 (591)
(Butoxy)dithiomethanoic acid; CH3.CH2.CH2.CH2O.CSSH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ dis oth/un 25°C 0.25M U B2=>24 1982SAa (40163) 314
****
C5H11N L Piperidine CAS 110-89-4 (105)
Perhydropyridine; cyclo(-CH2.CH2.CH2.NH.CH2.CH2-) C5H11N

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	non-aq	25°C	100%	U			1994CVa (40452)	315
							K(PdAB+2L=PdAL2+B)=3.14		
							K(PdAC+2L=PdAL2+C)=0.28		

Medium: CHCl3. A:n3-allyl; B:4-MeOC6H4.N=CH.CH=N.C6H4OMe; C:4-MeOC6H4.N=C(Me).C(Me)=N.C6H4OMe. Also data for L=morpholine, NHEt2, N-methylaniline.

****

C5H11NO2 HL Valine CAS 72-18-4 (43)

2-Amino-3-methylbutanoic acid; H2N.CH(CH(CH3)2)COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	U	M		1999SSd (40742)	316
							K(Pd(pn)+L)=11.36		

pn is 1,2-diaminopropane. For aminoacid protonation, K1=9.57, B2=11.70.

Pd++	gl	NaNO3	37°C	0.16M	M	M		1998ESa (40743)	317
							K(PdA+L)=9.55		

A is 1,3-diaminopropane.

Pd++	gl	KNO3	20°C	0.5M	U		K1=9.62 B2=17.76	1974KHb (40744)	318

****

C5H11NO2 L (8054)

Alanine ethyl ester;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.20M	M	M	K1=5.15	1987SKb (40866)	319
							K(Pd(dien)+L)=3.92		

****

C5H11NO2S HL Methionine CAS 63-68-3 (42)

2-Amino-4-(methylthio)butanoic acid; H2N.CH(CH2.CH2.S.CH3)COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaClO4	25°C	1.00M	C		K1=16.8 B2=34.30	2000SAb (41115)	320

Pd++	gl	NaNO3	25°C	0.10M	U	M		1999SSd (41116)	321
							K(Pd(pn)+L)=10.37		

pn is 1,2-diaminopropane. For aminoacid protonation, K1=9.10, B2=11.08.

Pd++	gl	NaNO3	37°C	0.16M	M	M		1998ESa (41117)	322
							K(PdA+L)=8.83		

A is 1,3-diaminopropane.

Pd++	gl	KNO3	25°C	0.50M	U			1978LIa (41118)	323
							K(Pd(en)+L)=9.14		
							K(Pd(en)+HL)=0.74		

****

C5H11NO2S H2L Penicillamine CAS 52-66-4 (350)
DL-2-Amino-3-mercapto-3-methylbutanoic acid; (CH3)2C(SH)CH(NH2)COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaClO4	25°C	1.00M	C		B2=48.2 K(Pd+HL)=27.3 K(Pd+2HL)=44.8	2000SAb (41278)	324

****

C5H11NO3 L (8128)
Serine ethyl ester;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.20M	M	M	K(Pd(dien)+L)=4.43	1987SKb (41312)	325

****

C5H11NS2 HL CAS 147-84-2 (2126)
Diethyldithiocarbamic acid; (CH3.CH2)2N.CSSH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	dis	oth/un	?	?	U	M	B2=64.9 B(PdLCl)=44.6	1969BHd (41367)	326
Pd++	sp	non-aq	?	100%	U	M	K(Pd(HA)2+2HL=PdL2+2H2A)=1.6	1968SRg (41368)	327

Medium: CCl4. H2A=dithizone

****

C5H12N2O2 HL Ornithine CAS 1069-31-4 (46)
2,5-Diaminopentanoic acid; H2N.CH2.CH2.CH2.CH(NH2)COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	U	M	K(Pd(pn)+L)=13.65 K(Pd(pn)+H+L)=19.86	1999SSd (41582)	328

pn is 1,2-diaminopropane. For aminoacid protonation, K1=10.58, B2=19.43.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	37°C	0.16M	M	M	K(PdA+L)=11.58 K(PdA+H+L)=18.56	1998ESa (41583)	329

A is 1,3-diaminopropane.

****

C5H12N2O2S HL Met-hydroxamic CAS 19253-87-3 (5992)
2-Amino-4-(methylthio)butanehydroxamic acid, Methionine hydrox.a.;
CH3.S.CH2.CH2.CH(NH2).CO.NHOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo

```
--------------------------------------------------------------------------------
Pd++       gl  KCl    25°C 0.15M U    M   K1=13.230 B2=23.333 1990MSa (41607) 330
                                           B(PdL(GlyGly))=21.058
                                           B(PdHL(GlyGly))=24.370
                                           B(Pd(GlyGly))=9.155
********************************************************************************
C5H13N3                 L                        (1866)
cis-3,5-Diaminopiperidine; C5H9N(NH2)2
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  NaClO4 20°C 0.10M U                      1979MSa (41795) 331
                                           K(PdL2+H)=6.35
                                           K(PdHL2+H)=4.16
pK's for the other isomer of PdL2
together with X-ray structure
********************************************************************************
C6H3N3O7               HL    Picric acid      CAS 88-89-1  (593)
2,4,6-Trinitrophenol; HO.C6H2(NO2)3
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M C    M                 2001NSa (42142) 332
                                           *K(PdL(H2O)2)=-5.00
                                           *B2(PdL(H2O)2)=-13.79
K(2PdL(H2O)2=Pd2(OH)L2+H)=-2.28, K(2PdL(H2O)2=Pd2(OH)L2+2H)=-6.59
********************************************************************************
C6H4N2O7S              H3L                      (2023)
2,4-Dinitroso-6-sulfonoresorcinol; (HO)2.C6H(N:O)2(SO3H)
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       sp  none   25°C  0.0  U        K1=4.2    B2=8.3    1980MGa (42269) 333
********************************************************************************
C6H5NO2                 L    Nitrobenzene     CAS 98-95-3  (3085)
Nitrobenzene; C6H5.NO2
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       sp  alc/w  25°C 100%  U    M                 1994PAa (42701) 334
                                           K(Pd3A3CO+L)=0.24
Medium: MeOH. A=Bis(diphenylphosphino)methane
********************************************************************************
C6H5NO2S               H2L                      (6876)
2-Mercaptopyridine-3-carboxylic acid;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       sp  alc/w  25°C  40%  C                      1996ABc (42708) 335
                                           K(Pd+HL)=16.10
```

K(Pd+H2L)=8.75
K(Pd+H3L=PdH2L+H)=3.05
*K(PdH2L)=-3.15

Medium: 40% v/v EtOH/H2O, 0.10 M NaClO4.

****

C6H6 L Benzene CAS 71-43-2 (2143)
Benzene, cyclohexatriene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	alc/w	25°C	100%	U	M		1994PAa	(43169) 336
							K(Pd3A3CO+L)<-1.15		

Medium: MeOH. A=Bis(diphenylphosphino)methane

****

C6H6NBr L 3-Bromoaniline CAS 591-19-5 (758)
3-Bromoaniline; H2N.C6H4.Br

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	kin	NaClO4	25°C	2.00M	U	M		1972VGa	(43177) 337
							K(M(H2O)4+L=M(H2O)3L+H2O)=6.30		

Medium: HClO4

****

C6H6N2O2 L m-Nitroaniline CAS 99-09-2 (464)
3-Nitroaminobenzene; H2N.C6H4.NO2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	kin	NaClO4	25°C	2.00M	U	M		1972VGa	(43389) 338
							K(M(H20)4+L=M(H20)3L+H20)=5.68		

Medium: HClO4

****

C6H6N2O2 L p-Nitroaniline CAS 100-01-6 (465)
4-Nitroaminobenzene; H2N.C6H4.NO2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	kin	NaClO4	25°C	2.0M	U			1972VGa	(43405) 339
							K(Pd(H2O)4+L=Pd(H2O)3L)=4.53		

****

C6H6O2 H2L Catechol CAS 120-80-9 (534)
1,2-Dihydroxybenzene, pyrocatechol; HO.C6H4.OH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	NaClO4	25°C	0.20M	U			1981CMb	(43807) 340
							K(Pd+H2L=PdL+2H)=-2.2		

****

C6H6O4 HL Kojic acid CAS 501-30-4 (1800)
5-Hydroxy-2-(hydroxymethyl)-4H-pyran-4-one;

```
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  alc/w   RT   20%  C  I     K1=7.44        1989MEb (44236) 341
Medium: 20% v/v MeOH/H2O.  Data for 20-50% v/v MeOH/H2O, EtOH/H2O,
acetone/H2O, DMF/H2O and dioxane/H2O.
********************************************************************************
C6H7N                   L    Aniline          CAS 62-53-3  (583)
Aminobenzene, aniline; C6H5.NH2
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       kin NaClO4 25°C 2.00M U    M                  1972VGa (44876) 342
                                        K(M(H2O)4+L=M(H20)3L+H20)=7.20
Medium: HClO4
********************************************************************************
C6H7N5                 HL    9-Methyladenine  CAS 700-00-5  (4347)
9-Methyl-6-aminopurine;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M C                        1997WKa (45172) 343
                                        K(PdACl+L=PdAL+Cl)=4.33
PdA is [PdH-1(gly-Met)].
********************************************************************************
C6H8N2                  L    2-Picolylamine   CAS 29722-36-9  (502)
2-(Aminomethyl)pyridine; C5H4N.CH2NH2
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  NaClO4 25°C 0.10M C                        1997RSa (45359) 344
                                        *K(PdL(H2O)2)=-4.43
                                        *B2(PdL(H2O)2)=-13.07
********************************************************************************
C6H8N2O2               HL    1-Methylthymine  CAS 4160-72-9  (7411)
2,4-Dihydroxy-1,5-dimethylpyrimidine;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M C    M                  2001NSa (45383) 345
                                        K(Pd(en)+L)=9.05
                                        K(Pd(en)+2L)=14.76
                                        *K(Pd(en)(H2O)L)=-8.44
K(Pd(en)(H2O)+L=Pd(en)(OH)L+H)=0.61,
K(2Pd(en)(H2O)2+2L=Pd2(en)2(OH)L2+H)=12.70
--------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M C    M                  2001NSa (45384) 346
                                        K(Pd(pic)+L)=9.56
                                        K(Pd(pic)+2L)=15.40
                                        *K(Pd(pic)(H2O)L)=-8.00
```

K(Pd(pic)(H2O)+L=Pd(pic)(OH)L+H)=1.56
K(2Pd(pic)(H2O)2+2L=Pd2(pic)2(OH)L2+H)=14.30. Hpic=picric acid.

Pd++ gl KNO3 25°C 0.20M C K1=7.71 2000NFa (45385) 347

Pd++ gl KNO3 25°C 0.20M C 1997WKa (45386) 348
K(PdACl+L=PdAL+Cl)=7.26
PdA is [PdH-1(gly-Met)].

****

C6H8O4 H2L CAS 5445-51-2 (69)
Cyclobutane-1,1-dicarboxylic acid; C4H6(COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaClO4	37°C	0.15M	C	M	K(Pd(en)+L)=6.16	2003TMb (45509)	349
Pd++	gl	NaClO4	25°C	0.10M	M	M	K(PdA+L)=6.61 K(PdA+H+L)=9.69	2002BSa (45510)	350

HA is S-methyl cysteine.

Pd++ gl NaNO3 25°C 0.10M C M K(PdA+L)=7.17
K(PdA+H+L)=9.44 2002MSb (45511) 351
A is N,N'-dimethylethylenediamine.

Pd++ gl NaNO3 25°C 0.10M C M K(Pd(bpy)(H2O)2+L)=8.45
K(Pd(bpy)(H2O)2+H+L)=11.37 2001SHc (45512) 352

Pd++ gl NaNO3 25°C 0.10M C M K(Pd(bpy)(H2O)2+L+A)=18.31
K(Pd(bpy)(H2O)2+L+A+H)=24.76
K(Pd(bpy)(H2O)2+L+A+2H)=27.05 2001SHc (45513) 353
HA is uracil.

Pd++ gl NaNO3 25°C 0.10M C M K(Pd(bpy)(H2O)2+L+A)=20.14
K(Pd(bpy)(H2O)2+L+A+H)=26.74
K(Pd(bpy)(H2O)2+L+A+2H)=28.62 2001SHc (45514) 354
HA is uridine.

Pd++ gl NaNO3 25°C 0.10M C M K(Pd(bpy)(H2O)2+L+A)=16.64
K(Pd(bpy)(H2O)2+L+A+H)=22.77
K(Pd(bpy)(H2O)2+L+A+2H)=25.58 2001SHc (45515) 355
HA is inosine.

Pd++ gl NaNO3 25°C 0.10M C M 2001SHc (45516) 356

K(Pd(bpy)(H2O)2+L+A)=17.06
K(Pd(bpy)(H2O)2+L+A+H)=23.24
K(Pd(bpy)(H2O)2+L+A+2H)=27.08

A is adenine.

Pd++ gl NaNO3 25°C 0.10M C M 2001SHc (45517) 357
K(Pd(bpy)(H2O)2+L+A)=16.00
K(Pd(bpy)(H2O)2+L+A+H)=22.42
K(Pd(bpy)(H2O)2+L+A+2H)=27.92
K(Pd(bpy)(H2O)2+L+A+3H)=31.49

H3A is inosine-5'-monophosphate.

Pd++ gl NaNO3 25°C 0.10M U M 1999SSd (45518) 358
K(Pd(pn)+L)=6.05

pn is 1,2-diaminopropane. For acid protonation, K1=5.42 B2=8.06.

Pd++ gl NaNO3 37°C 0.16M M M 1998ESa (45519) 359
K(PdA+L)=6.39

A is 1,3-diaminopropane.

Pd++ gl NaClO4 25°C 0.10M C M 1997RSa (45520) 360
K(PdA+L)=7.34

A=2-(Aminomethyl)pyridine

****

C6H8O6S H3L CAS 99-68-3 (3692)
(Carboxymethylthio)butanedioic acid; HOOC.CH(S.CH2.COOH).CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Pd++	gl	KNO3	20°C	0.10M	U		K1=5.20		1977CAd (45707)	361

****

C6H8O7 H3L Citric acid CAS 77-92-9 (95)
2-Hydroxypropane-1,2,3-tricarboxylic acid; HOOCCH2.CH(OH)(COOH).CH2COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Pd++	kin	NaClO4	25°C	1.00M	U	H	K1=3.46		1997SEa (46230)	362
							K(Pd+HL=PdL+H)=0.66			

DH(Pd+HL=PdL+H)=-3.4 kJ mol-1, DS(Pd+HL=PdL+H)=2 J K-1 mol-1

****

C6H9NO6 H3L NTA CAS 139-13-9 (191)
Nitrilotriethanoic acid; N(CH2.COOH)3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Pd++	gl	NaClO4	20°C	1.00M	C	M T	K1=17.1	B2=23.70	1976AMa (46982)	363
							K(PdL+H)=2.48			
							K(PdHL+H)=0.5			
							K(PdL(OH)+H)=7.82			
							K(PdL+PdL(OH)=Pd2L2(OH))=3.1			

By exchange with PdBr4. K(PdL+Br)=2.7

****

C6H9N3O2 HL Histidine CAS 71-00-1 (1)
2-Amino-3-(4'-imidazolyl)propanoic acid; H2N.CH(CH2.C3H3N2)COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	U	M	K(Pd(pn)+L)=14.75	1999SSd (47602)	364

pn is 1,2-diaminopropane. For aminoacid protonation, K1=9.53, B2=15.81, B3=17.81.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	37°C	0.16M	M	M	K(PdA+L)=12.48	1998ESa (47603)	365

A is 1,3-diaminopropane.

****

C6H10O4S H2L CAS 111-17-1 (139)
3,3'-Thiodipropanoic acid; HOOC.CH2.CH2.S.CH2.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	NaCl	25°C	0.50M	U	M	K(PdCl4+L=PdCl3L+Cl)=5.42 K(PdCl3L+L=PdCl2L2+Cl)=2.87 K(PdL2+Cl)=4.30 K(PdL2Cl+Cl)=2.51	1987CMc (48193)	366
Pd++	sp	NaClO4	25°C	0.50M	U		B(PdH2L)=16.71 B(PdH4L2)=31.60 K(Pd+H2L)=7.40 K(PdH2L+H2L)=5.58	1986CCe (48194)	367

****

C6H10O4S2 H2L CAS 7244-02-2 (438)
1,2-Bis(carboxymethylthio)ethane; HOOC.CH2.S.CH2.CH2.S.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	25°C	0.10M	U		K1=4.48 B2=6.91	1978POa (48249)	368

****

C6H10O4S2 H2L CAS 1119-62-6 (3697)
3,3'-Di(thiopropanoic acid); HOOC.CH2.CH2.S.S.CH2.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	NaClO4	25°C	0.50M	U		B(PdH2L)=15.25 B(Pd2H2L)=19.67 K(Pd+H2L)=5.92 K(PdH2L+H2L)=10.34	1986CCe (48270)	369

****

C6H10O4Se2 H2L CAS 86515-79-7 (6099)
Ethylene-bis-selenoglycolic acid; HOOC.CH2.Se.CH2.CH2.Se.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	con	NaCl	25°C	3.00M	C		K1=6.32 B2=11.97	1988PFb (48297)	370

****

C6H11NO2 HL CAS 89203-64-5 (3435)
1-Pyrrolidine-1-ethanoic acid, 1-Azacyclopentane-1-ethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	none	25°C	0.0	U		K1=11.20 B2=21.23	1974HFa (48504)	371

****

C6H11NO4 H2L Aminoadipic CAS 542-32-5 (1259)
2-Aminohexanedioic acid; HOOC.CH2.CH2.CH2.CH(NH2).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	none	25°C	0.0	U			1979FWa (48583)	372
							K(PdL2+H)=5.04		
							K(PdHL2+H)=4.45		
							K(PdCl4+2HL=PdH2L2+4Cl)=10.5		

****

C6H11N3O4 HL Gly-Gly-Gly CAS 556-33-2 (415)
Glycyl-glycyl-glycine; H2N.CH2.CO.NH.CH2.CO.NH.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.20M	C		B2=23.0	1999AJa (48987)	373
							B(PdLCl)=17.91		
							B(PdH-1LCl)=14.64		
							B(PdH-2L)=9.07		
							B(PdH-3L)=-1.15		
Medium: 0.1 M KNO3, 0.1 M KCl. B(PdH-1L2)=19.81; B(PdH-2L2)=13.40.									
Pd++	sp	oth/un	25°C	?	U			1978CWa (48988)	374
							K(PdH-2L+H)=2.2		
							K(PdH-1L+H)=1.5		

****

C6H12 L CAS 592-41-6 (2771)
1-Hexene; CH2:CH(CH2)3.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	oth	non-aq	30°C	100%	U	M		1974KKb (49012)	375
							K(PdCl2+L)=0.28		

Medium: N-methylacetamide

****

C6H12 L CAS 760-21-4 (2772)
2-Ethyl-1-butene; CH2:C(C2H5).CH2.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	oth	non-aq	30°C	100%	U	M	1974KKb (49015)		376
							K(PdCl2+L)=-0.89		

Medium: N-methylacetamide

****

C6H12 L CAS 763-29-1 (2770)
2-Methyl-1-pentene; CH2:C(CH3).CH2.CH2.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	oth	non-aq	30°C	100%	U	M	1974KKb (49017)		377
							K(PdCl2+L)=-0.85		

Medium: N-methylacetamide

****

C6H12 L CAS 691-37-2 (2767)
4-Methyl-1-pentene; CH2:CH.CH2.CH(CH3)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	oth	non-aq	30°C	100%	U	M	1974KKb (49019)		378
							K(PdCl2+L)=0.18		

Medium: N-methylacetamide

****

C6H12 L CAS 7668-21-3 (2774)
cis-2-Hexene; CH3.CH:CH.CH2.CH2.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	oth	non-aq	30°C	100%	U	M	1974KKb (49021)		379
							K(PdCl2+L)=0.11		

Medium: N-methylacetamide

****

C6H12 L (2768)
cis-4-Methyl-2-pentene; CH3.CH:CH.CH(CH3)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	oth	non-aq	30°C	100%	U	M	1974KKb (49023)		380
							K(PdCl2+L)=0.26		

Medium: N-methylacetamide

****

C6H12 L CAS 4050-45-7 (2773)
trans-2-Hexene; CH3.CH:CH.CH2.CH2.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo

```
Pd++       oth non-aq 30°C 100%  U    M                  1974KKb (49025) 381
                                        K(PdCl2+L)=-0.31
Medium: N-methylacetamide
**************************************************************************
C6H12                   L                       CAS 4461-48-7  (2769)
trans-4-Methyl-2-pentene; CH3.CH:CH.CH(CH3)2
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       oth non-aq 30°C 100%  U    M                  1974KKb (49027) 382
                                        K(PdCl2+L)=-0.42
Medium: N-methylacetamide
**************************************************************************
C6H12N2O3               HL    B-Ala-B-Ala      CAS 34322-87-7  (2118)
3-Alanyl-3-alanine; H2N.CH2.CH2.CO.NH.CH2.CH2.COOH
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M C                       2003AMb (49061) 383
                                        K(PdH-1L)=11.19
                                        K(PdH-2L)=2.52
                                        K(PdH-1L2)=17.76
Method: competition with chloride (0.1 M). Medium: 0.10 M KNO3/0.10 M KCl.
**************************************************************************
C6H12O2S2               HL                      CAS 35088-67-6  (2829)
1-Ethylthio-2-thiocarboxymethylethane; C2H5.S.CH2.CH2.S.CH2.COOH
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       sp  oth/un 25°C 0.10M U        K1=6.34   B2=11.03  1978POa (49451) 384
**************************************************************************
C6H13NO2                HL    Isoleucine       CAS 73-32-5  (424)
2-Amino-3-methylpentanoic acid; CH3.CH2.CH(CH3).CH(NH2).COOH
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       gl  KNO3   20°C  0.5M U        K1=9.71   B2=18.15  1974KHb (49911) 385
**************************************************************************
C6H13NO2                HL    Leucine          CAS 61-90-5  (47)
2-Amino-4-methylpentanoic acid; H2N.CH(CH2.CH(CH3)2)COOH
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.50M U      T                 1978LIa (50096) 386
                                        K(Pd(en)+L)=11.41
--------------------------------------------------------------------------
Pd++       gl  KNO3   20°C  0.5M U        K1=9.94   B2=18.17  1974KHb (50097) 387
**************************************************************************
C6H13NO2S               HL    Ethionine        CAS 67-21-0  (1909)
2-Amino-4-(ethylthio)butanoic acid; CH3.CH2.S.CH2.CH2.CH(NH2).COOH
```

```
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       gl  NaClO4 25°C 1.00M C        K1=16.8   B2=34.00  2000SAb (50266) 388
------------------------------------------------------------------------------
Pd++       gl  NaCl   25°C 0.16M U        K1=9.112  B2=14.361 1986AEa (50267) 389
                                         B(Pd2L)=18.487
                                         B(Pd2H2L)=23.979
                                         B(PdH-1L)=5.059
******************************************************************************
C6H13N3O3              HL    Citrulline         (579)
2-Amino-5-ureidovaleric acid; H2N.CO.NH.CH2.CH2.CH2.CH(NH2).COOH
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.10M C        B2=16.23       1991GLb (50585) 390
******************************************************************************
C6H14N2O2              HL    Lysine           CAS 56-87-1  (41)
2,6-Diaminohexanoic acid; H2N.(CH2)4.CH(NH2)COOH
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       gl  NaNO3  25°C 0.10M U    M                   1999SSd (50830) 391
                                         K(Pd(pn)+L)=11.49
                                         K(Pd(pn)+H+L)=20.44
pn is 1,2-diaminopropane. For aminoacid protonation, K1=10.44, B2=19.66.
------------------------------------------------------------------------------
Pd++       gl  NaNO3  37°C 0.16M M    M                   1998ESa (50831) 392
                                         K(PdA+L)=9.28
                                         K(PdA+H+L)=19.03
A is 1,3-diaminopropane.
******************************************************************************
C6H14O2S               L                    CAS 10595-09-2  (3698)
3,3'-Thiodipropanol; S(CH2CH2CH2OH)2
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       kin oth/un 25°C 1.00M U                        1996SEa (51036) 393
                                         K1eff=4.51
Medium: 1.00 M HClO4.
******************************************************************************
C6H14O2S2              L                    CAS 5244-34-8  (4390)
3,6-Dithiaoctan-1,8-diol; HO.CH2.CH2.S.CH2.CH2.S.CH2.CH2.OH
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       sp  KCl    25°C 1.00M U        B2=21.63       1991ZPa (51038) 394
******************************************************************************
C6H18N4                L    Trien-tetramine  CAS 112-24-3  (11)
1,4,7,10-Tetraazadecane; H2N.CH2.CH2.NH.CH2.CH2.NH.CH2.CH2.NH2
```

```
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  NaClO4 25°C 1.00M C  I M   K1=40.1        1985YAa (52131) 395
********************************************************************************
C6H18N4                 L    Tren            CAS 4097-89-6  (817)
2,2',2''-Triaminotriethylamine; (H2N.CH2.CH2)3N
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 1.00M C    M                 1986ANa (52207) 396
                                          B(Pd2L2)=77.4
Ternary complexes with Cl-, Br-, I- and SCN-. pH-metric and spec. study.
********************************************************************************
C7H5N                   L    Cyanobenzene     CAS 100-47-0  (4406)
Cyanobenzene, benzonitrile; C6H5.CN
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       sp  alc/w  25°C 100%  U    M                 1994PAa (52570) 397
                                        K(Pd3A3CO+L)=0.13
Medium: MeOH. A=Bis(diphenylphosphino)methane
********************************************************************************
C7H5NO4               H2L    Dipicolinic aci  CAS 449-83-2  (418)
2,6-Pyridinedicarboxylic acid; C5H3N.(COOH)2
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  KCl    25°C 0.20M U        K1=16.0        1980KDb (52799) 398
********************************************************************************
C7H6O2                  HL    Salicylaldehyde  CAS 90-02-8  (193)
2-Hydroxybenzaldehyde, Salicylaldehyde; HO.C6H4.CHO
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  diox/w 25°C  50%  U        K1=7.74   B2=14.77  1949MMa (53631) 399
********************************************************************************
C7H6O2                  HL    Benzoic Acid     CAS 65-85-0  (462)
Benzenecarboxylic acid; C6H5.COOH
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       sp  alc/w  25°C 100%  U    M                 1994PAa (53853) 400
                                        K(Pd3A3CO+L)=4.0
Medium: MeOH. A=Bis(diphenylphosphino)methane
********************************************************************************
C7H7NO2                 HL                     CAS 150-13-0  (1376)
4-Aminobenzoic acid; H2N.C6H4.COOH
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
```

```
--------------------------------------------------------------------------------
Pd++       sp  alc/w  25°C 100%  U    M                  1994PAa (55390) 401
                                        K(Pd3A3CO+L)=3.52
Medium: MeOH. A=Bis(diphenylphosphino)methane
********************************************************************************
C7H7NO2                HL                     CAS 495-18-1  (184)
Benzohydroxamic acid; C6H5.CO.NH.OH
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  diox/w 25°C  70%  U        K1=9.52   B2=17.55  1969JSa (55512) 402
********************************************************************************
C7H8                   L                      CAS 108-88-3  (2144)
Toluene; C6H5.CH3
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       sp  alc/w  25°C 100%  U    M                  1994PAa (55785) 403
                                        K(Pd3A3CO+L)=-1.10
Medium: MeOH. A=Bis(diphenylphosphino)methane
********************************************************************************
C7H8OS                 L                      CAS 1193-82-4  (1881)
Phenylmethylsulfoxide; C6H5.SO.CH3
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       sp  alc/w  25°C  95%  U                       1982CCa (56055) 404
                                        K(PdCl4+L=PdLCl3+Cl)=0.94
********************************************************************************
C7H8O2               H2L    Methylcatechol   CAS 452-86-8  (525)
1,2-Dihydroxy-4-methylbenzene; CH3.C6H3(OH)2
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       sp  oth/un 25°C 0.20M U                       1981CMa (56075) 405
                                        K(Pd+H2L=PdL+2H)=2.40
********************************************************************************
C7H9N                  L    3-Methylaniline  CAS 108-44-1  (755)
3-Methylaniline (3-Toluidine); CH3.C6H4.NH2
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       kin oth/un 25°C    ?  U    M                  1972VGa (56309) 406
                                        K(M(H2O)4+L=M(H2O)3L+H20)=7.57
********************************************************************************
C7H9N                  L    4-Methylaniline  CAS 106-49-0  (754)
4-Methylaniline (4-Toluidine); CH3.C6H4.NH2
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
```

Pd++ kin oth/un 25°C ? U M 1972VGa (56343) 407
K(M(H2O)4+L=M(H20)3L+H2O)=8.04
****
C7H9NO L p-Anisidine CAS 104-94-7 (3764)
4-Methoxyaniline; CH3O.C6H4.NH2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ kin oth/un 25°C 2.0M U M 1972VGa (56397) 408
K(M(H2O)4+L=M(H20)3L+H20)=7.81
****
C7H9N5O HL 9-Ethylguanine CAS 879-08-3 (6679)
9-Ethyl-2-amino-6-hydroxypurine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KNO3 25°C 0.20M C M 2003NFa (56518) 409
K(PdA+L)=8.11
K(PdA+H+L)=15.06
K(2PdA+L)=14.95
A is bis-((2-pyridyl)methyl)amine
****
C7H10N4O2S L Sulfaguanidine CAS 57-67-0 (4469)
4-Aminobenzenesulfonyl guanidine; H2N.C(:NH).NH.SO2.C6H4.NH2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp NaClO4 ? 1.0M U M 1970RGa (56704) 410
K(PdCl2+L)=5.42
K(PdCl2L+L)=4.38
****
C7H11N3O L Acetylhistamine CAS 673-49-4 (7412)
4-(2'-Acetylaminoethyl)imidazole; C3H3N2.CH2CH2.NH.COCH3

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KNO3 25°C 0.20M C M 2003NFa (56961) 411
K(PdA+L)=7.72
K(2PdA+L=(PdA)2H-1L+H)=6.13
A is bis-((2-pyridyl)methyl)amine

Pd++ gl KNO3 25°C 0.20M C 1997WKa (56962) 412
K(PdACl+L=PdAL+Cl)=5.48
K(2PdACl+L=Pd2A2H-1L+2Cl)=-0.9
PdA is [PdH-1(gly-Met)].
****
C7H11N3O2 L CAS 7389-87-9 (3162)
Histidine methyl ester

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo

```
--------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M M    M                  1987SKb (57005) 413
                                        K(Pd(dien)+L)=4.61
                                        K(Pd(dien)+H+L)=10.58
********************************************************************************
C7H13NO2               HL                     CAS 3235-67-4  (3772)
Piperidine-N-ethanoic acid; C5H10N-CH2.COOH
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       sp  none   25°C  0.0  U        K1=10.32  B2=19.72  1974HFa (57456) 414
********************************************************************************
C7H13NO3S              HL                     CAS 65-82-7  (8508)
N-Acetylmethionine;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M C    M                  2003NFa (57495) 415
                                        K(PdA+L)=3.41
A is bis-((2-pyridyl)methyl)amine. Competitive method using uridine.
--------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M C   HM                  2000NFa (57496) 416
                                        K(Pd(dien)+H+L)=8.49
                                        K(Pd(dien)+L)=5.61
                                        K(PdA+H+L)=7.07
                                        K(PdA+L)=3.66
Method: uridine as a competitive ligand. A is terpyridine. K(Pd(dien)+OH)=
6.25, K(PdA+OH)=6.91. By calorimetry: DH(Pd(dien)+L)=-38.8 kJ mol-1.
--------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M C   HM                  2000NFa (57497) 417
                                        K(Pd(gly-gly)+H+L)=8.74
                                        K(Pd(gly-gly)+L)=4.89
                                        K(Pd(gly-ala)+H+L)=8.76
                                        K(Pd(gly-ala)+L)=4.91
Method: uridine as a competitive ligand.  K(Pd(gly-gly)+OH)=4.64,
K(Pd(gly-ala)+OH)=4.72. By calorimetry: DH(Pd(gly-ala)+L)=-38.0 kJ mol-1.
--------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M C   HM                  2000NFa (57498) 418
                                        K(Pd(gly-met)+H+L)=7.29
                                        K(Pd(gly-met)+L)=3.24
                                        K(Pd(gly-met)+OH)=4.82
Method: uridine as a competitive ligand.
By calorimetry: DH(Pd(gly-met)+L)=-21.2 kJ mol-1.
********************************************************************************
C7H13NO4             H2L    Aminopimelic     CAS 627-76-9  (1260)
2-Amino-heptanedioic acid; HOOC.(CH2)4.CH(NH2).COOH
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Pd++       gl  KCl    25°C 0.10M U                       1979FWa (57501) 419
```

K(Pd(HL)2=Pd(HL)L+H)=4.58
K(Pd(HL)L=PdL2+H)=5.33
K(PdCl4+2HL=Pd(HL)2+4Cl)=11.5

****

C7H13N3O4 HL Ala-Asn CAS 1999-41-3 (5934)
Alanyl-asparagine; NH2.CH(CH3.CO.NH.CH(CH2.CO.NH2).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	NaCl	20°C	0.15M	U			1990YKa (57648)	420
							Keff(Pd+L+2Cl)=21.5		

Eff constant : stability of PdCl4 is not accounted

****

C7H13N3O4 HL Gly-b-Ala-Gly CAS 42538-54-5 (9058)
Glycyl-beta-alanylglycine;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	oth/un	25°C	0.20M	C		K1=16.26	2003AMb (57660)	421
							K(PdH-1L)=12.06		
							K(PdH-2L)=11.79		

Method: competition with chloride (0.1 M). Medium: 0.10 M KNO3/0.10 M KCl.

****

C7H13N3O4 HL Gly-Gly-b-Ala CAS 42538-53-4 (4453)
Glycylglycyl-beta-alanine; H2N.CH2.CO.NH.CH2.CO.NH.CH2.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	oth/un	25°C	0.20M	C		K1=16.79	2003AMb (57679)	422
							K(PdH-1L)=10.97		
							K(PdH-2L)=10.98		

Method: competition with chloride (0.1 M). Medium: 0.10 M KNO3/0.10 M KCl.

****

C7H13N3O4 HL Gly-Gly-Ala CAS 19729-30-7 (3775)
Glycylglycylalanine; H2N.CH2.CO.NH.CH2.CO.NH.CH(CH3).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.20M	C		B2=23.7	1999AJa (57687)	423
							B(PdLCl)=17.91		
							B(PdH-1LCl)=14.45		
							B(PdH-2L)=8.99		
							B(PdH-3L)=-2.40		

Medium: 0.1 M KNO3, 0.1 M KCl. B(PdH-1L2)=19.60; B(PdH-2L2)=15.74.

****

C7H13N3O4 HL b-Ala-Gly-Gly CAS 42538-55-6 (4452)
beta-Alanylglycylglycine; H2N.CH2.CH2.CO.NH.CH2.CO.NH.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo

Pd++ gl oth/un 25°C 0.20M C K1=14.40 2003AMb (57694) 424
K(PdH-1L)=8.76
K(PdH-2L)=9.03
Method: competition with chloride (0.1 M). Medium: 0.10 M KNO3/0.10 M KCl.
****
C7H14N2O3S HL Gly-Met CAS 554-94-9 (726)
Glycyl-methionine; H2N.CH2.CO.NH.CH(CH2.CH2.S.CH3).COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KCl 25°C 0.20M C M 2001BNa (57800) 425
*K(PdL)=-3.61
K(PdH-1L+Cl)=2.03
*K(PdH-1L)=-5.34
K(PdH-1L+H+L)=11.47
K(PdH-1L+L)=4.56, K(PdH-1L+glygly)=4.72.
****
C7H15NO5S HL MOPSO CAS 68399-77-9 (1967)
3-(N-Morpholino)-2-hydroxypropane sulfonic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KNO3 25°C 0.10M C M K1=3.50 2001AAa (57996) 426
Also data for ternary complexes with 5'-GMP, 5'-IMP and 5'-CMP.
****
C7H17N2O4PS H2L CAS 82611-22-1 (7392)
Methionyl-1-aminoethylphosphonic acid; H2L

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KNO3 25°C 0.10M C B2=21.60 1997LBa (58201) 427
B(PdHLCl2)=24.01
B(PdLCl)=17.87
B(PdH-1L)=10.76
B(PdH-2L)=-0.01
Data are for (S,S)-isomer. B(PdH2L2)=34.96, B(PdHL2)=28.74, B(PdH-1L2)=12.51
B(PdH-2L2)=2.48. Data also for (R,S)-isomer.

Pd++ gl KCl 25°C 0.10M U 1996BRa (58202) 428
K(Pd+2L+2H)=35.35
K(Pd+2L)=21.99
K(Pd+2L+H)=29.14
H2L: S,S-diastereoisomer

Pd++ gl KCl 25°C 0.10M U 1996BRa (58203) 429
K(Pd+2L+2H)=35.01
K(Pd+2L)=21.54
K(Pd+2L+H)=28.71
H2L: S,R-diastereoisomer
****

C7H20N4 L CAS 4741-99-5 (12)
1,4,8,11-Tetraazaundecane; H2N.CH2.CH2.NH.CH2.CH2.CH2.NH.CH2.CH2.NH2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaClO4	25°C	1.00M	C		K1=46.3	1985YAa (58359)	430

****
C8H6O4 H2L Phthalic acid CAS 88-99-3 (113)
Benzene-1,2-dicarboxylic acid; C6H4(COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	?	M	M	K1=3.31 K(PdA+L)=3.04	1988SKa (59003)	431

A=diethylenetriamine
****
C8H8NO2Cl HL CAS 61756-69-2 (4569)
N-Acetyl-N-(4-chlorophenyl)hydroxamine; Cl.C6H4.N(CO.CH3).OH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	diox/w	25°C	70%	U		K1=9.63 B2=17.37	1968JSb (59281)	432

Medium: 70% dioxan, 0.1 M KCl
****
C8H8O2 HL p-Toluic acid CAS 99-94-5 (1372)
4-Methylbenzoic acid; CH3.C6H4.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	alc/w	25°C	100%	U	M	K(Pd3A3CO+L)=3.99	1994PAa (59501)	433

Medium: MeOH. A=Bis(diphenylphosphino)methane
****
C8H9NOS HL CAS 4822-44-0 (3240)
N-(Mercaptoacetyl)aniline (thioglycolanilide); C6H5.NH.CO.CH2.SH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	oth	diox/w	30°C	70%	U		B2=24.34	1973BSa (60163)	434

Medium: 0.1 M KCl
****
C8H9NO3 HL CAS 5663-54-7 (1095)
2,4-Dihydroxy-acetophenone oxime; (HO)2.C6H3.C(CH3):NOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	diox/w	27°C	60%	U	I	K1=8.99 B2=17.80	1974SRa (60400)	435

****
C8H9NO4S H2L CAS 7717-21-7 (3846)
N-(Phenylsulfonyl)aminoethanoic acid; C6H5SO2NHCH2COOH

```
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       vlt NaClO4 25°C 0.10M U        K1=18.9   B2=24.4   1990GBb (60517) 436
******************************************************************************
C8H9N3O7              H2L    Uramildiacetic   CAS 13055-06-5  (185)
5-Amino-2,4,6-trioxo-1,3-perhydrodiazimino-N,N-diethanoic acid;
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       sp  KCl    20°C 0.10M U    M                  1987KUa (60652) 437
                                          B(PdCl(OH)L)=22.12
******************************************************************************
C8H9O3P               H2L                    CAS 1707-08-0  (1969)
2-Styrylphosphonic acid; C6H5.CH:CH.PO3H2
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.12M U        K1=3.33   B2=6.55   1979RZb (60673) 438
******************************************************************************
C8H10                  L    p-Xylene         CAS 106-42-3  (2145)
1,4-Dimethylbenzene, 4-Xylene; CH3.C6H4.CH3
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       sp  alc/w  25°C 100%  U    M                  1994PAa (60682) 439
                                          K(Pd3A3CO+L)=-1.15
Medium: MeOH. A=Bis(diphenylphosphino)methane
******************************************************************************
C8H10N3OCl             HL                     CAS 5756-79-6  (4578)
3-Ethyl-3-hydroxy-1-(2-chlorophenyl)triazene;
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       gl  diox/w 25°C  70%  U        K1=10.49  B2=20.46  1968DSa (60784) 440
Medium: 70% dioxan, 0.1 M KCl
******************************************************************************
C8H10N3OCl             HL                     CAS 5756-78-5  (4579)
3-Ethyl-3-hydroxy-1-(4-chlorophenyl)triazene;
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Pd++       gl  diox/w 25°C  70%  U        K1=10.68  B2=20.66  1968DSa (60789) 441
Medium: 70% dioxan, 0.1 M KCl
******************************************************************************
C8H11N                 L    DiMethylaniline  CAS 121-69-7  (1343)
N-Phenyl-N,N-dimethylamine; C6H5.N(CH3)2
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
```

```
Pd++       sp  non-aq 25°C 100%  U    M                  1979SSa (60989) 442
                                        K(PdA+L)=1.0
A=Tetraphenylporphyrin (in its excited triplet state)
**************************************************************************
C8H11N3O              HL                    CAS 5956-70-7  (4529)
3-Hydroxy-3-methyl-1-(4-tolyl)triazene; CH3.C6H4.N:N.N(OH).CH3
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       gl  diox/w 25°C  70%  U        K1=11.77  B2=23.10  1970DSb (61244) 443
Medium: 70% dioxan, 0.1 M KCl
**************************************************************************
C8H11N3O2             HL                    CAS 5756-72-9  (4533)
3-Hydroxy-3-methyl-1-(4'-methoxyphenyl)triazene; CH3O.C6H4.N:N.N(OH).CH3
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       gl  diox/w 25°C  70%  U        K1=12.25  B2=23.70  1970DSb (61257) 444
Medium: 70% dioxan, 0.1 M KCl
**************************************************************************
C8H11N3O3             HL                    CAS 2497-02-1  (3230)
Acetyl-L-histidine;
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M C    M                  2003NFa (61275) 445
                                        K(PdA+L)=8.47
                                        K(PdA+H+L)=11.58
                                        K(2PdA+L=(PdA)2H-1L+H)=6.99
A is bis-((2-pyridyl)methyl)amine
--------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M C                       1997WKa (61276) 446
                                        K(PdACl+L=PdAL+Cl)=5.33
                                        K(2PdACl+L=Pd2A2H-1L+2Cl)=0.1
PdA is [PdH-1(gly-Met)].
**************************************************************************
C8H14N4O5             HL    Tetraglycine    CAS 637-84-3  (1849)
Glycyl-Glycyl-Glycyl-Glycine; H2N.CH2.CO.NH.CH2.CO.NH.CH2.CO.NH.CH2.COOH
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M C                       1999AJa (62024) 447
                                        B(PdLCl)=18.25
                                        B(PdH-1LCl)=14.81
                                        B(PdH-2L)=10.13
                                        B(PdH-3L)=2.45
Medium: 0.1 M KNO3, 0.1 M KCl.
**************************************************************************
C8H14O5S2           H2L                   CAS 4408-66-6  (8332)
Oxybis(ethylenethio)diethanoic acid;
```

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KNO3 20°C 0.10M U K1=6.22 1977CAc (62135) 448
****
C8H15NO2 HL (4572)
1-Azacycloheptane-1-ethanoic acid, hexamethyleneimine-ethanoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp none 25°C 0.0 U K1=10.48 B2=20.45 1974HFa (62159) 449
****
C8H15N3O4 HL (1008)
Glycyl-b-alanyl-b-alanine; H2NCH2CONH(CH2)2CONH(CH2)2COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl oth/un 25°C 0.20M C K1=16.66 2003AMb (62255) 450
K(PdH-1L)=13.24
K(PdH-2L)=10.12
Method: competition with chloride (0.1 M). Medium: 0.10 M KNO3/0.10 M KCl.
****
C8H15N3O4 HL (1009)
b-Alanyl-glycyl-b-alanine; H2N(CH2)2CONHCH2CONH(CH2)2COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl oth/un 25°C 0.20M C 2003AMb (62263) 451
K(PdH-1L)=12.64
K(PdH-2L)=9.58
Method: competition with chloride (0.1 M). Medium: 0.10 M KNO3/0.10 M KCl.
****
C8H15N7O2S3 L Famotidine CAS 76824-35-6 (6502)
N'-(Aminosulfonyl)-3-((2-(diaminomethyleneamino)-4-thiazolyl)methylthio)propanamidi
ne

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl NaCl 25°C 0.10M U K1=6.20 B2=12.69 1995CCa (62274) 452
B(PdH-1L)=1.20
B(PdHL2)=18.40
B(PdH-1L2)=6.23
****
C8H16N2O3 HL Gly-Leu CAS 869-19-2 (255)
Glycyl-leucine; H2N.CH2.CO.NH.CH(CH2.CH(CH3)2).COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl NaNO3 25°C 0.10M U M 1999SSd (62393) 453
K(Pd(pn)+L)=7.73

K(Pd(pn)+L=PdH-1(pn)L+H)=3.30
pn is 1,2-diaminopropane. For aminoacid protonation, K1=8.13.
****
C8H22N4 L CAS 35513-90-7 (1545)
1,4,9,12-Tetraazadodecane; NH2.(CH2)2.NH.(CH2)4.NH.(CH2)2.NH2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaClO4	25°C	1.00M	C		K1=42.0	1985YAa (63383)	454

****
C9H6NO4IS H2L Ferron CAS 547-91-1 (275)
7-Iodo-8-hydroxyquinoline-5-sulfonic acid; (HO)(HO3S)C9H4NI

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	25°C	0.0	U			1967MBe (63822)	455
							K(?)=9.05		

****
C9H7NO4S H2L Sulfoxine CAS 84-88-8 (448)
8-Hydroxyquinoline-5-sulfonic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	oth	oth/un	?	?	U		K1=11.6 B2=20.14	1973BIb (64573)	456

Method: fluorescence
****
C9H11NOS HL CAS 36076-50-3 (4680)
N-Phenyl-N-methyl-2-mercaptoacetamide; HS.CH2.CO.N(CH3).C6H5

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	oth	diox/w	30°C	70%	U		K1=9.87 B2=18.84	1973BSc (65682)	457

****
C9H11NO2 HL Phenylalanine CAS 63-91-2 (2)
2-Amino-3-phenylpropanoic acid; H2N.CH(CH2.C6H5)COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.50M	U			1978LIa (65966)	458
							K(Pd(en)+L)=10.86		
Pd++	gl	KNO3	20°C	0.5M	U		K1=9.32 B2=18.27	1974KHb (65967)	459

****
C9H11NO2 HL B-Phenylalanine CAS 614-19-7 (187)
3-Amino-3-phenyl-propanoic acid; H2N.CH(C6H5).CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	U	M		1999SSd (66011)	460
							K(Pd(pn)+L)=11.06		

pn is 1,2-diaminopropane. For aminoacid protonation, K1=9.12, B2=11.01.
****
C9H11NO4S H2L CAS 1080-44-0 (4682)
N-(4-Toluenesulfonyl)glycine, N-tosylglycine; CH3.C6H4.SO2.NH.CH2.COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ vlt NaClO4 25°C 0.10M U 1994BGa (66427) 461
Keff(Pd+H2L=PdL)=19.9
Beff(Pd+2H2L=PdL2)=23.3
Complex formation involves loss of the amide proton.

Pd++ vlt NaClO4 25°C 0.10M U K1=17.8 B2=23.4 1990GBb (66428) 462
****
C9H11NO4S H2L (6960)
N-(Phenylsulfonyl)-2-aminopropanoic acid; C6H5.SO2.NH.CH(CH3)COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ vlt NaClO4 25°C 0.10M U 1994BGa (66429) 463
Keff(Pd+H2L=PdL)=20.6
Beff(Pd+2H2L=PdL2)=23.0
Complex formation involves loss of the amide proton.
****
C9H11NO4S H2L (6961)
N-(Phenylsulfonyl)-3-aminopropanoic acid; C6H5.SO2.NH.CH2.CH2.COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ vlt NaClO4 25°C 0.10M U 1994BGa (66430) 464
Keff(Pd+H2L=PdL)=17.1
Beff(Pd+2H2L=PdL2)=20.8
Complex formation involves loss of the amide proton.
****
C9H12N2O6 HL Uridine CAS 58-96-8 (828)
Uracil-1-beta-D-ribofuranoside;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KNO3 25°C 0.20M C M 2003NFa (66703) 465
K(PdA+L)=8.90
A is bis-((2-pyridyl)methyl)amine

Pd++ gl NaNO3 25°C 0.10M C M 2002MSb (66704) 466
K(PdA+L)=8.70
K(PdA+2L)=14.37
K(PdA+H+L)=15.17
A is N,N'-dimethylethylenediamine.

Pd++ gl KNO3 25°C 0.20M C M 2001NSa (66705) 467

K(Pd(en)+L)=8.98
K(Pd(en)+2L)=14.80
*K(Pd(en)(H2O)L)=-7.67
K(Pd(en)(H2O)+L=Pd(en)(OH)L+H)=1.31,
K(2Pd(en)(H2O)2+2L=Pd2(en)2(OH)L2+H)=12.14

Pd++ gl KNO3 25°C 0.20M C M 2001NSa (66706) 468
K(Pd(pic)+L)=9.20
K(Pd(pic)+2L)=15.09
*K(Pd(pic)(H2O)L)=-7.94
K(Pd(pic)(H2O)+L=Pd(pic)(OH)L+H)=1.26,
K(2Pd(pic)(H2O)2+2L=Pd2(pic)2(OH)L2+H)=13.82. Hpic=picric acid.

Pd++ gl NaNO3 25°C 0.10M C M 2001SHc (66707) 469
K(Pd(bpy)(H2O)2+L)=9.71
K(Pd(bpy)(H2O)2+H+L)=13.29
K(Pd(bpy)(H2O)2+2L)=16.88
K(Pd(bpy)(H2O)2+2L+H)=22.65

Pd++ gl KNO3 25°C 0.20M C K1=7.42 2000NFa (66708) 470

Pd++ gl KCl 25°C 0.20M U M 1997KFa (66709) 471
K(Pd(dien)Cl+L)=7.42
K(Pd(terpy)Cl+L)=7.56
dien=diethylentriamine, terpy=2,2'-6',2"-terpyridine. Data also for many related nuceleobases
---
Pd++ gl KNO3 25°C 0.20M C 1997WKa (66710) 472
K(PdACl+L=PdAL+Cl)=7.00
PdA is [PdH-1(gly-met)].

Pd++ gl KNO3 25°C 0.50M U M 1981LIa (66711) 473
K(Pd(en)(H2O)2+L)=8.65
K(Pd(en)(H2O)L+L)=5.92
K(Pd(dien)(H2O)+L)=8.08
****
C9H13N2O9P H3L UMP-5 CAS 58-97-9 (2948)
Uridine-5'-monophosphoric acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ nmr oth/un 23°C 0.30M U M 1985PGa (66980) 474
Keff(PdA+HL)=2.99
A=Tetrakis(4-N-methylpyridyl)porphyrin. pD=7.0
****
C9H13N3O5 L Cytidine CAS 65-46-3 (2152)
Cytidine, Cytosine-1-beta-D-ribofuranoside;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---

Pd++ gl KNO3 25°C 0.20M C M 2003NFa (67073) 475
K(PdA+L)=5.83
A is bis-((2-pyridyl)methyl)amine

Pd++ sp NaClO4 25°C 1.0M U M 1984ETa (67074) 476
K(PdCl4+L=PdLCl3+Cl)=4.49
K(PdLCl3+L=PdL2Cl2+Cl)=3.45
K(Pd(en)Cl2+L=PdenLCl+Cl)=3.32
K(Pd(en)LCl+L=PdenL2+Cl)=2.56
****
C9H14N3O8P H2L CMP-5 CAS 63-37-6 (1243)
Cytidine-5'-monophosphoric acid, Cytidilic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KNO3 25°C 0.10M C M K1=3.35 2001AAa (67262) 477
Also data for ternary complexes with MOPSO, TAPSO and ACES.
****
C9H17N3O4S HL Gly-Met-Gly CAS 51529-34-1 (7566)
Glycylmethionylglycine; NH2CH2CONHCH(CH2CH2SCH3)CONHCH2COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KCl 25°C 0.20M C M 2001BNa (67872) 478
*K(PdL)=-3.65
K(PdH-1L+Cl)=2.21
*K(PdH-1L)=-5.57
K(PdH-1L+H+L)=11.49
K(PdH-1L+L)=4.71, K(PdH-1L+glygly)=4.50, K(PdH-1L+L=PdH-2L2+H)=-4.99.
****
C9H18N2O3 HL Leu-Ala CAS 7298-84-2 (4659)
Leucylalanine- H2N.CH(CH2.CH(CH3)2).CO.NH.CH(CH3).COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl NaNO3 25°C 0.10M U M 1999SSd (67912) 479
K(Pd(pn)+L)=8.19
K(Pd(pn)+L=PdH-1(pn)L+H)=3.74
pn is 1,2-diaminopropane. For aminoacid protonation, K1=8.13.
****
C9H23N3 L CAS 3030-47-5 (4605)
N,N,N',N",N"-Pentamethyl-diethylenetriamine; (CH3)2NCH2CH2N(CH3)CH2CH2N(CH3)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl R4N.X 25°C 0.10M C M 1998BBa (68282) 480
B(PdLCl)=24.9
B(PdH-1L)=14.1
Medium: 0.1 M NMe4Cl

```
Pd++       gl  NaClO4 25°C 0.50M C  I                    1981GMf (68283) 481
                                        K(PdL=PdLOH+H)=-7.293
                                        K(PdL+PdLOH)=1.08
In 0.5 NaNO3, K(PdL=PdLOH+H)=-7.241, K(PdL+PdLOH)=0.70
**************************************************************************
C9H24N4                 L                    CAS 129880-56-4  (1533)
1,4,10,13-Tetraazatridecane; H2N.(CH2)2.NH.(CH2)5.NH.(CH2)2.NH2
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.10M C        K1=37.9        1985YAa (68336) 482
**************************************************************************
C10H7NO2               HL                   CAS 131-91-9  (2668)
1-Nitroso-2-naphthol, alpha-Nitroso-beta-naphthol;
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       gl  alc/w   RT   40%  M        K1=5.53   B2= 8.86  1993RAb (68585) 483
Medium: 40% v/v EtOH/H2O, 0.1 M NaClO4.
**************************************************************************
C10H7NO2               HL                   CAS 132-53-6  (2524)
2-Nitroso-1-naphthol;
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       gl  alc/w   RT   40%  M        K1=4.46   B2= 8.92  1993RAb (68653) 484
Medium: 40% v/v EtOH/H2O, 0.1 M NaClO4.
**************************************************************************
C10H7NO5S             H2L                   CAS 3682-32-4  (1812)
2-Nitroso-1-hydroxynaphthalene-4-sulfonic acid;
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       gl  oth/un  RT  0.10M M        K1=4.46   B2= 8.68  1993RAb (68892) 485
Medium not stated.
**************************************************************************
C10H7NO8S2            H3L    Nitroso-R acid   CAS 525-05-3  (1811)
1-Nitroso-2-hydroxynaphthalene-3,6-disulfonic acid;
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Pd++       sp  NaClO4 25°C 0.10M U                      1964MSa (69024) 486
                                        K(?)=8.9
--------------------------------------------------------------------------
Pd++       sp  oth/un 25°C    ?  U                      1963BGb (69025) 487
                                        K(?)=8.8
**************************************************************************
C10H8N2                 L    2,2'-Bipyridyl   CAS 366-18-7  (25)
2,2'-Bipyridine; (C5H4N)2
--------------------------------------------------------------------------
```

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       vlt NaClO4 25°C 0.10M U    M                  1994BGa (69635) 488
                                        Beff(Pd(bpy)A)=30.3
                                        Beff(Pd(bpy)HB)=30.7
                                        Beff(Pd(bpy)HC)=30.8
                                        Beff(Pd(bpy)D)=23.2
H2A=N-tosylglycine, H2B=N-phenylsulfonylglycine, H2C=tosyl-alpha-alanine,
H2D=benzoylglycine. Data for other L.
*************************************************************************
C10H8N2O4              HL    2-Furil dioxime  CAS 522-27-0  (3319)
1,2-Di(2'-furyl)ethane-1,2-dione dioxime; (C4H3O.C(:N.OH))2
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       dis NaClO4 20°C 0.10M U        B2=43.7        1967STa (69702) 489
*************************************************************************
C10H9NO4S             H2L                     CAS 116-63-2  (4781)
1-Amino-2-naphthol-4-sulfonic acid;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       sp  oth/un 25°C    ?  U        B2=7.90        1968MBa (70187) 490
*************************************************************************
C10H9N3O3              HL                       (1933)
4-(5'-Methyl-3'-isoxazolylazo)-1,3-dihydroxybenzene; (HO)2C6H3.N:N.C3H2NO
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       sp  NaClO4 25°C 0.10M U                       1989TSb (70412) 491
                                        K(PdHL+H)=2.65
                                        K(PdL+H)=7.09
                                        K(PdH-1L+H)=9.57
*************************************************************************
C10H11N3S               L                     CAS 5351-70-2  (4734)
Cinnamaldehyde thiosemicarbazone; C6H5.CH:CH.CH:N.NH.CS.NH2
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       sp  alc/w  20°C  50%  U        B2=11.74       1972KLa (71085) 492
Medium: 50% EtOH, 0.1 M, pH=5
*************************************************************************
C10H12N4O5             HL    Inosine          CAS 58-63-9  (2344)
Hypoxanthine-9-beta-D-ribofuranoside;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       gl  NaClO4 25°C 0.10M M    M                  2002BSa (71392) 493
                                        K(PdA+L)=6.94
                                        K(PdA+H+L)=11.00
```

K(PdA+2L)=10.27
HA is S-methyl cysteine.

Pd++ gl NaNO3 25°C 0.10M C M 2002MSb (71393) 494
K(PdA+L)=8.03
K(PdA+2L)=12.74
K(PdA+B+L)=12.29
K(PdA+H+B+L)=17.72
A is N,N'-dimethylethylenediamine, B is 1,1-cyclobutanedicarboxylic acid.

Pd++ gl NaNO3 25°C 0.10M C M 2001SHc (71394) 495
K(Pd(bpy)(H2O)2+L)=9.73
K(Pd(bpy)(H2O)2+H+L)=12.55
K(Pd(bpy)(H2O)2+2L)=14.89
K(Pd(bpy)(H2O)2+2L+H)=20.11
K(Pd(bpy)(H2O)2+2L+2H)=25.37.

Pd++ gl NaNO3 25°C 0.10M U M 1999SSd (71395) 496
K(Pd(pn)+L)=6.83
K(Pd(pn)+2L)=11.26
pn is 1,2-diaminopropane. For nucleotide protonation, K1=8.55.

Pd++ gl NaNO3 37°C 0.16M M M 1998ESa (71396) 497
K(PdA+L)=6.92
K(PdA+2L)=11.58
A is 1,3-diaminopropane.

Pd++ gl KCl 25°C 0.20M U M 1997KFa (71397) 498
K(Pd(dien)Cl+L)=6.82
K(Pd(dien)Cl+H+L)=12.79
K(2Pd(dien)Cl+L)=11.56
K(Pd(terpy)Cl+L)=6.92
dien=diethylentriamine, terpy=2,2'-6',2"-terpyridine. K(Pd(terpy)+H+L)=12.10
Data also for many related nuceleobases

Pd++ gl NaClO4 25°C 0.10M C M 1997RSa (71398) 499
K(PdA+L)=7.43
K(PdA+2L)=11.77
A=2-(Aminomethyl)pyridine

Pd++ gl KNO3 25°C 0.20M C 1997WKa (71399) 500
K(PdACl+L=PdAL+Cl)=6.38
K(PdACl+H+L=PdAHL+Cl)=12.73
K(2PdACl+L=Pd2A2L+2Cl)=10.93
PdA is [PdH-1(gly-Met)].

Pd++ gl NaClO4 25°C 0.10M M T H 1996SEc (71400) 501
K(PdACl2+L)=6.04
K(PdACl2+2L)=9.56
A is N,N,N',N'-tetramethyl-1,2-diaminoethane. Also data at 15.5, 20, 30

and 35.2 C. DH(PdACl2+L)=17.0 kJ mol-1, DH(PdACl2+2L)=-10.7.

Pd++ gl NaClO4 25°C 0.10M M T H 1996SEc (71401) 502
K(PdACl2+L)=5.78
K(PdACl2+2L)=10.48
A is N,N,N',N'-tetraethyl-1,2-diaminoethane. Also data at 15.5, 20, 30 and 35.2 C. DH(PdACl2+L)=30.6 kJ mol-1, DH(PdACl2+2L)=35.6.
****
C10H12N6S L CAS 91262-80-9 (6101)
3-(4',5'-Dimethyl-2'-thiazolylazo)-2,6-diaminopyridine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp NaClO4 25°C 0.25M U 1988SSe (71519) 503
B(PdHL)=16.36
B(PdH3L2)=31.47
B(PdH4L2)=27.36
****
C10H13NO4S H2L N-Tosylalanine (1584)
N-(4-Toluenesulfonyl)-3-aminopropanoic acid; CH3.C6H4.SO2.NH.CH2.CH2.COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ vlt NaClO4 25°C 0.10M U 1994BGa (71773) 504
Keff(Pd+H2L=PdL)=16.8
Beff(Pd+2H2L=PdL2)=20.5
Complex formation involves loss of the amide proton.
****
C10H13N3OS L (4791)
alpha-Ethylfurylacrolein thiosemicarbazone;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp alc/w 20°C 50% U B2=12.68 1972KLa (71797) 505
Medium: 50% EtOH, 0.1 M, pH=5
****
C10H13N4O8P H3L IMP CAS 131-99-7 (843)
Inosine-5'-monophosphoric acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl NaClO4 25°C 0.10M M M 2002BSa (71862) 506
K(PdA+L)=7.45
K(PdA+H+L)=14.10
HA is S-methyl cysteine.

Pd++ gl KNO3 25°C 0.10M C M K1=3.27 2001AAa (71863) 507
Also data for ternary complexes with MOPSO, TAPSO and ACES.

Pd++ gl NaNO3 25°C 0.10M C M 2001SHc (71864) 508

K(Pd(bpy)(H2O)2+L)=10.17
K(Pd(bpy)(H2O)2+H+L)=16.65
K(Pd(bpy)(H2O)2+L+2H)=20.98
K(Pd(bpy)(H2O)2+2L)=14.80
K(Pd(bpy)(H2O)2+2L+H)=21.49, K(Pd(bpy)(H2O)2+2L+2H)=28.50.

Pd++ gl NaNO3 25°C 0.10M U M 1999SSd (71865) 509
K(Pd(pn)+L)=8.13
K(Pd(pn)+2L)=11.92
K(Pd(pn)+H+L)=14.03
pn is 1,2-diaminopropane. For nucleotide protonation, K1=8.67, B2=14.63.

Pd++ gl NaNO3 37°C 0.16M M M 1998ESa (71866) 510
K(PdA+L)=9.82
K(PdA+2L)=14.82
K(PdA+H+L)=15.14
A is 1,3-diaminopropane.

Pd++ gl NaClO4 25°C 0.10M C M 1997RSa (71867) 511
K(PdA+L)=10.79
K(PdA+H+L)=17.02
K(PdA+2L)=14.65
A=2-(Aminomethyl)pyridine

Pd++ gl NaClO4 25°C 0.10M M T H 1996SEc (71868) 512
K(PdACl2+L)=4.43
K(PdACl2+2L)=9.20
A is N,N,N',N'-tetramethyl-1,2-diaminoethane. Also data at 15, 20, 30 and 35 C. DH(PdACl2+L)=-73.1 kJ mol-1, DH(PdACl2+2L)=-62.4.

Pd++ gl NaClO4 25°C 0.10M M T H 1996SEc (71869) 513
K(PdACl2+L)=4.39
K(PdACl2+2L)=9.73
A is N,N,N',N'-tetraethyl-1,2-diaminoethane. Also data at 15, 20, 30 and 35 C. DH(PdACl2+L)=-88.6 kJ mol-1, DH(PdACl2+2L)=-2.09.

Pd++ sp NaClO4 25°C 0.10M U M 1994SEa (71870) 514
K(PdACl+L=PdALCl)=-1.46
A=N,N,N',N'-Tetramethylethylenediamine

****

C10H13N5O5 HL Guanosine CAS 118-00-3 (1402)
2-Aminopurin-6-one-9-riboside;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo

---

Pd++ gl NaNO3 37°C 0.16M M M 1998ESa (72015) 515
K(PdA+L)=7.85
A is 1,3-diaminopropane.

****

C10H14N2O5 H2L Thymidine CAS 50-89-5 (8256)

Thymine deoxyriboside, 1-(2-Deoxy-beta-ribofuranosyl)-5-methyluracil;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	C	M	K(PdA+L)=8.75 K(PdA+2L)=14.53 K(PdA+B+L)=16.26	2002MSb (72085)	516

A is N,N'-dimethylethylenediamine, B is 1,1-cyclobutanedicarboxylic acid.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	25°C	0.10M	U	M	K(Pd(pn)+L)=8.92 K(Pd(pn)+2L)=14.84	1999SSd (72086)	517

pn is 1,2-diaminopropane. For nucleotide protonation, K1=9.54.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	37°C	0.16M	M	M	K(PdA+L)=8.27 K(PdA+2L)=13.57	1998ESa (72087)	518

A is 1,3-diaminopropane.

****

C10H14N2O6 L alpha-Thymidine CAS 4449-43-8 (695)
Thymine-2-desoxyribofuranosyl-5-methyluracil;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaNO3	20°C	1.0M	M		K1=8.15 B2=15.82 K3=6.37 K4=3.56	1997WYa (72106)	519
Pd++	gl	KNO3	25°C	0.50M	U	M	K(Pd(en)(H2O)2+L)=8.84 K(Pd(en)(H2O)L+L)=5.85 K(Pd(dien)(H2O)+L)=8.31	1981LIa (72107)	520

****

C10H14N3 L CAS 29198-32-1 (6921)
4-Diazo-N,N-diethylaniline; N:N.C6H4.N(C2H5)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	alc/w	25°C	100%	U	M	K(Pd3A3CO+L)=2.30	1994PAa (72122)	521

Medium: MeOH. A=Bis(diphenylphosphino)methane

****

C10H14N5O7P H2L AMP-2 CAS 81012-86-4 (2437)
Adenosine-2'-monophosphoric acid, 2-Adenylic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.10M	C	M	K(Pd(dien)+H+L)=11.1	2002WBa (72190)	522

K(Pd(dien)+L)=5.30
K(2Pd(dien)+H+L)=13.5

****

C10H14N5O8P H3L GMP-2 CAS 130-50-7 (8778)
Guanosine-2'-monophosphoric acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.10M	C	M		2002WBa (72525)	523
							K(Pd(dien)+2H+L)=20.82		
							K(Pd(dien)+H+L)=15.40		
							K(Pd(dien)+L)=7.50		
							K(2Pd(dien)+H+L)=19.45		

K(2Pd(dien)+L)=13.70, K(3Pd(dien)+L)=16.59.

Pd++	gl	KNO3	25°C	0.10M	C	M		2002WBa (72526)	524
							K(Pd(en)+4H+2L)=39.57		
							K(Pd(en)+2H+2L)=28.4		
							K(Pd(en)+2L)=13.52		
							K(Pd(en)+H+L)=15.98		

K(Pd(en)+L)=9.54

****

C10H14N5O8P H3L GMP-5 CAS 85-32-5 (2947)
Guanosine-5'-monophosphoric acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaClO4	25°C	0.10M	M	M		2002BSa (72593)	525
							K(PdA+L)=11.96		
							K(PdA+H+L)=18.75		
							K(PdA+2H+L)=22.00		

HA is S-methyl cysteine.

Pd++	gl	KNO3	25°C	0.10M	C	M		2002WBa (72594)	526
							K(Pd(en)+4H+2L)=40.96		
							K(Pd(en)+2H+2L)=28.8		
							K(Pd(en)+2L)=11.7		
							K(Pd(en)+H+L)=16.37		

K(Pd(en)+L)=9.83.

Pd++	gl	KNO3	25°C	0.10M	C	M	K1=3.60	2001AAa (72595)	527

Also data for ternary complexes with MOPSO, TAPSO and ACES.

Pd++	gl	NaClO4	25°C	0.10M	C	M		1997RSa (72596)	528
							K(PdA+L)=10.82		
							K(PdA+H+L)=17.35		
							K(PdA+2L)=14.46		

A=2-(Aminomethyl)pyridine

Pd++	gl	NaClO4	25°C	0.10M	M	T	H		1996SEc (72597)	529

K(PdACl2+HL)=4.14
K(PdACl2+2HL)=8.03
A is N,N,N',N'-tetramethyl-1,2-diaminoethane. Also data at 15, 20, 30 and 35 C. DH(PdACl2+HL)=-11.8 kJ mol-1, DH(PdACl2+2HL)=-14.8.

Pd++ gl NaClO4 25°C 0.10M M T H 1996SEc (72598) 530
K(PdACl2+HL)=4.00
K(PdACl2+2HL)=7.14
A is N,N,N',N'-tetraethyl-1,2-diaminoethane. Also data at 15, 20, 30 and 35 C. DH(PdACl2+HL)=-76.2 kJ mol-1, DH(PdACl2+2HL)=-111.

****

C10H15N5O4 HL Gly-Gly-His CAS 93404-95-6 (74)
Glycyl-glycyl-histidine; H2N.CH2.CO.NH.CH2.CO.NH.CH(CH2.C3H3N2).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KCl	25°C	0.20M	C			1997BCb (72800)	531
							*K(PdH-4L)=-11.30		

*K corresponds to deprotonation of coordinated -NH2.

****

C10H15N5O10P2 H3L ADP CAS 20398-34-9 (2181)
Adenosine-5'-diphosphoric acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	nmr	oth/un	23°C	0.30M	U	M		1985PGa (73011)	532
							Keff(PdA+L)=4.08		

A=Tetrakis(4-N-methylpyridyl)porphyrin. pD=7.0

****

C10H16N2O8 H4L EDDS CAS 52759-67-8 (1100)
1,2-Diaminoethane-N,N'-di-1,4-butanedioic acid; (CH2.NH.CH(COOH)CH2.COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	NaClO4	20°C	0.10M	U	M		1986PKa (73171)	533
							K(PdCl+H2L)=10.93		
							K(PdCl+L)=23.67		

Pd++	gl	KNO3	30°C	0.10M	U		K1=13.6	1971STc (73172)	534

****

C10H16N2O8 H4L EDTA CAS 60-00-4 (120)
1,2-Diaminoethane-N,N,N',N'-tetraethanoic acid, Sequestric acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	NaClO4	21°C	0.20M	U	M	K1=25.6	1983KDa (74071)	535
							K(PdL+Cl)=5.4		

Pd++	sp	NaClO4	25°C	1.00M	U	M		1981SDa (74072)	536
							K(PdL+Cl)=2.26		

K(PdL+Br)=2.40
K(PdL+I)=2.60
K(PdL+SCN)=3.30
K(PdL+OH)=4.41 K(PdL+NH3)=4.84 K(PdL+S2O3)=4.66 K(PdL+thiocarbamate)=4.00

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	none	25°C	0.0	U		K1=26.4	1978KRa (74073)	537
Pd++	gl	oth/un	20°C	1.00M	U	I M	K1=24.5	1976AMa (74074)	538
							K(PdL+H)=3.01		
							K(PdHL+H)=3.21		
							K(PdH2L+H)=0.09		

Medium: NaBr/NaClO4. By exchange with PdBr4

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	oth	NaClO4	25°C	0.20M	U		K1=18.5	1955MKa (74075)	539

****

C10H16N6S L Cimetidine CAS 51481-61-9 (5716)

Cimetidine; CH3.C3H2N2.CH2.S.CH2.CH2.NH.C(:NCN)NH.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaCl	25°C	0.10M	U		K1=7.63 B2=15.13	1995CCa (74912)	540
							B(PdH-1L)=0.52		
							B(PdH-2L)=-10.95		
							B(PdH-1L2)=7.87		
							B(PdH-2L2)=-1.18		

****

C10H26N4 L CAS 66475-54-5 (5756)

3,10-Diazadodecane-1,12-diamine; NH2.CH2.CH2.NH.(CH2)6.NH.CH2.CH2.NH2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.10M	C	I M	K1=38.14	1985YAa (76766)	541

****

C10H28N2O12P4 H8L CAS 23605-74-5 (435)

(Hexamethylenedinitrilo)tetra(methylenephosphonic acid);
(CH2.CH2.CH2.N(CH2.PO3H2)2)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.10M	U		K1=10.83	1980ZRb (76841)	542
							K(PdL+H)=9.56		
							K(PdHL+H)=6.71		
							K(PdH2L+H)=5.73		
							K(PdH3L+H)=4.65		

****

C11H7NO4 H2L CAS 122844-38-6 (8293)

1-Hydroxy-4-nitroso-2-naphthalenecarboxylic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo

Pd++ gl alc/w RT 40% M K1=4.95 B2= 8.72 1993RAb (76893) 543
Medium: 40% v/v EtOH/H2O, 0.1 M NaClO4.
****
C11H7NO4 H2L CAS 32446-26-7 (8294)
3-Hydroxy-4-nitroso-2-naphthalenecarboxylic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl alc/w RT 40% M K1=3.89 B2= 7.86 1993RAb (76901) 544
Medium: 40% v/v EtOH/H2O, 0.1 M NaClO4.
****
C11H8O3 H2L CAS 86-48-6 (1129)
1-Hydroxy-2-naphthoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl alc/w RT 40% M K1=6.88 B2=13.31 1993RAb (77015) 545
Medium: 40% v/v EtOH/H2O, 0.1 M NaClO4.
****
C11H8O3 H2L CAS 92-70-6 (1130)
2-Hydroxy-3-naphthoic acid (3-Hydroxy-2-naphthoic acid);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl alc/w RT 40% M K1=11.84 B2=17.04 1993RAb (77128) 546
Medium: 40% v/v EtOH/H2O, 0.1 M NaClO4.
****
C11H9NO2S HL CAS 29556-13-6 (1450)
N-Phenyl-2-thenoylhydroxamic acid; C4H3SCON(C6H5)OH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl diox/w 25°C 50% M T H K1=9.22 B2=16.97 1977ABb (77351) 547
50% v/v dioxan - water; Data also for complexes with Cu(II), Zn, Ni, Co, Mn
****
C11H9NO3 H2L CAS 80690-05-7 (872)
3-Hydroxy-2-methyl-1,4-naphthoquinone monoxime;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl diox/w 30°C 0.10M U K1=5.63 B2=10.22 1981KSa (77365) 548
K3=4.61
****
C11H9N3O HL CAS 10335-29-2 (3937)
2-(2'-Pyridylazo)phenol; C5H4N.N:N.C6H4.OH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp alc/w 20°C 50% U K1=17.1 1967ANa (77461) 549
Medium: 50% MeOH, 0.1 M NaClO4

****

C11H10N4 L PAPHY CAS 2215-33-0 (1305)
Pyridine-2-aldehyde-2'-pyridyl-hydrazone; C5H4N.CH:N.NH.C5H4N

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaCl	25°C	3.00M	U	M	K(PdCl2+HL=PdHLCl+Cl)=4.00 K(PdLCl+H)=5.30 K(PdCl2+2PdLCl=Pd3L2Cl4)=8.30	1981MIb (77710)	550

****

C11H12N2O L Antipyrine CAS 60-80-0 (2026)
2,3-Dimethyl-1-phenyl-3-pyrazolin-5-one, Phenazone;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	?	0.60M	U		K1=5.58	1971KBe (78005)	551

Medium: K2SO4

****

C11H12N2O2 HL Tryptophan CAS 73-22-3 (3)
2-Amino-3-(3-indolyl)propanoic acid; H2N.CH(CH2.C8H6N)COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.50M	U		K(Pd(en)+L)=10.83	1978LIa (78230)	552

****

C11H14N2O3 HL Gly-Phe CAS 3321-03-7 (829)
Glycyl-phenylalanine; H2N.CH2.CO.NH.CH(CH2.C6H5).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.20M	C		B(PdLCl)=17.94 B(PdH-1LCl)=16.09 B(PdH-2L)=5.30 B(PdH-1L2)=20.10	1999AJa (78815)	553

Medium: 0.1 M KNO3, 0.1 M KCl. B(PdH-1L)=14.10.

****

C11H14N2O3 HL Phe-Gly CAS 721-90-4 (830)
Phenylalanyl-glycine; H2N.CH(CH2.C6H5).CO.NH.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.20M	C		B(PdLCl)=17.58 B(PdH-1LCl)=15.20 B(PdH-2L)=4.50 B(PdH-1L2)=19.20	1999AJa (78828)	554

Medium: 0.1 M KNO3, 0.1 M KCl. B(PdH-1L)=13.2; B(PdH-2L2)=13.70.

****
C11H18N2O8 H4L CAS 4408-81-5 (923)
1,3-Diaminopropane-N,N,N',N'-tetraethanoic acid; ((HOOC.CH2)2N.CH2.)2.CH2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl oth/un 20°C 1.00M C K1=28.8 1976AMa (79465) 555
Medium: NaBr/NaClO4. By exchange with PdBr4
****
C11H20N2 L (6343)
3,5-Dipropyl-4-ethylpyrazole

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ nmr non-aq 32°C 100% U 1987FKa (79696) 556
K(PdCl2+2L)=6.7
Medium: Deuterated DMSO (D6). With N-methyl analogue: K(PdCl2+2L)=9.6;
N-benzyl: K=7.9; N-allyl: K=10.8
****
C12H8N2 L Phenanthroline CAS 66-71-7 (144)
1,10-Phenanthroline;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp none 25°C 0.0 C K2=9.4 1975PJb (80508) 557
*K(PdL)=-3.3
*K(Pd(OH)L)=-5.9
*K(Pd(OH)2L)=-9.6
****
C12H10N2O5S H3L Tropeolin 0 CAS 547-57-9 (1090)
Chrysoin; HSO3.C6H4.N:N.C6H3(OH)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp oth/un 25°C ? U 1963SDd (80738) 558
K(Pd+2HL)=9.4(?)
****
C12H10N3OBr HL CAS 5756-88-7 (4001)
1-(4'-Bromophenyl)-3-hydroxy-3-phenyltriazene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl diox/w 25°C 70% U K1=10.86 B2=21.30 1965PSd (80754) 559
Medium: 70% dioxan, 0.1 M KCl
****
C12H10N3OCl HL CAS 52756-05-6 (3998)
1-(2'-Chlorophenyl)-3-hydroxy-3-phenyltriazene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---

Pd++ gl diox/w 25°C 70% U K1=10.43 B2=20.43 1964PSg (80761) 560
Medium: 70% dioxan, 0.1 M KCl
****
C12H10N3OCl HL CAS 5756-86-5 (3999)
1-(4'-Chlorophenyl)-3-hydroxy-3-phenyltriazene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl diox/w 25°C 70% U K1=10.70 B2=20.95 1964PSb (80767) 561
Medium: 70% dioxan, 0.1 M KCl
****
C12H11N3O4S H2L (4003)
3-Hydroxy-3-phenyl-1-(4'-sulfonyl)triazene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl diox/w 25°C 70% U K1=9.71 B2=19.03 1964PSf (80942) 562
Medium: 70% dioxan, 0.1 M KCl

Pd++ sp oth/un 25°C ? U 1958DSa (80943) 563
K(?)=11.52
Acetate buffer
****
C12H12N2S2 HL CAS 1141-88-4 (7739)
2,2'-Dithiodianiline, 2,2'-Diaminodiphenyl disulfide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp none C K1=6.17 2000GNa (81110) 564
****
C12H13N3 L CAS 1539-42-0 (932)
bis-((2-Pyridyl)methyl)-amine (Di-2-picolylamine); C5H4N.CH2NHCH2.C5H4N

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KNO3 25°C 0.20M C 2003NFa (81289) 565
*K(PdL(H2O))=-7.08
****
C12H20N2O8 H4L CAS 40623-42-5 (1101)
1,2-Diaminoethane-N,N'-di(2-pentane-1,5-dioic acid); (CH2NHCH(COOH)CH2CH2COOH)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KNO3 30°C 0.10M U K1=13.4 1971STc (82091) 566
****
C12H20N2O8 H4L CAS 2458-58-4 (922)
1,4-Diaminobutane-N,N,N',N'-tetraethanoic acid; (HOOC.CH2)2N.(CH2)4.N(CH2.COOH)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---

Pd++ gl oth/un 20°C 1.00M C K1=25.8 1976AMa (82233) 567
Medium: NaBr/NaClO4. By exchange with PdBr4
****
C12H24O2S4 L (6657)
1,4,7,10-Tetrathia-13,16-dioxacyclooctadecane, 1,4,7,10-Tetrathia-18-crown-6;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ ix none 25°C 0.0 U K1=32.3 1991BTa (83119) 568
****
C12H24O4S2 L CAS 296-39-9 (4938)
1,4,10,13-Tetraoxa-7,16-dithiacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ cal oth/un 25°C 0.50M M H K1=21.1 1990IWa (83141) 569
Medium: 0.5M HNO3. DH(K1)=-82.4 kJ mol-1, DS(K1)= 127.6 J K-1 mol-1.
****
C12H24O4S2 L (6528)
7,10,13,16-Tetraoxa-1,4-dithiacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ cal oth/un 25°C 0.50M M H K1=25.1 1990IWa (83151) 570
Medium: 0.5M HNO3. DH(K1)=-184.1 kJ mol-1, DS(K1)= -137 J K-1 mol-1.
****
C12H29N3 L CAS 123-12-6 (4904)
(N,N,N",N"-Tetraethyl-diethylenetriamine; (C2H5)2N.CH2.CH2.NH.CH2.CH2.N(C2H5)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl NaClO4 25°C 0.50M C I 1981GMf (84249) 571
K(PdL=PdLOH+H)=-7.688
K(PdL+PdLOH)=0.90
In 0.5 NaNO3, K(PdL=PdLOH+H)=-7.677, K(PdL+PdLOH)=0.48
****
C12H30N4 L (7251)
2,5,8,11-Tetramethyl-2,5,8,11-tetraazadodecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl R4N.X 25°C 0.10M C M K1=23.38 1998BBa (84292) 572
K(PdL+H+Cl)=6.85
B(PdH-1L)=13.9
K(PdL+OH)=4.3
Medium: 0.1 M NMe4Cl
****
C12H30N4 L (6740)
Tris(2-(dimethylamino)ethyl)amine; N(CH2CH2.N(CH3)2)3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaCl	25°C	1.00M	U	I	K1=30.5	1993AMa (84303)	573
Pd++	gl	oth/un	25°C	1.00M	U	M	K(Pd(H2O)L+Cl=PdClL)=2.6 K(Pd(H2O)L+Br=PdBrL)=2.8 K(Pd(H2O)L+SCN=Pd(SCN)L)=5.57	1993AMa (84304)	574

C12H30N6 L CAS 296-35-5 (143)
1,4,7,10,13,16-Hexaazacyclooctadecane; cyclo(-(NH.CH2.CH2)6-)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	cal	NaCl	25°C	0.50M	U	HM	DH(2PdCl4+L=Pd2LCl2+6Cl)=-110.8 kJ mol-1	1993BBa (84349)	575
Pd++	gl	NaCl	25°C	0.50M	C	H	K1=29.2 B(PdHL)=37.47 B(PdH2L)=42.40 B(Pd2LCl2)=51.8	1992BBf (84350)	576

By calorimetry: DH(PdCl4+H6L)=-6.3 kJ mol-1.

C13H8N2O6Cl2S H3L CAS 60743-06-8 (8478)
2-[(3,5-Dichloro-2-hydroxyphenyl)azo]-5-sulfobenzoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	NaClO4	RT	0.10M	C		K1=15.51	1978GSc (84477)	577

C13H9NO2BrCl HL CAS 104614-71-3 (9109)
4-Bromo-N-(3-chlorophenyl)-N-hydroxybenzamide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	diox/w	25°C	50%	C	M	K1=11.13 B(Pd(gly)L)=20.61	2001AMc (84578)	578

Medium: 50% v/v dioxane/H2O

C13H9NO2ClF HL CAS 104614-72-4 (9107)
N-(3-Chlorophenyl)-4-fluoro-N-hydroxybenzamide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	diox/w	25°C	50%	C	M	K1=11.34 B(Pd(gly)L)=20.98	2001AMc (84586)	579

Medium: 50% v/v dioxane/H2O

C13H9NO2Cl2 HL CAS 67201-86-9 (9108)
4-Chloro-N-(3-chlorophenyl)-N-hydroxybenzamide;

```
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Pd++       gl  diox/w 25°C  50%  C    M   K1=11.15       2001AMc (84594) 580
                                         B(Pd(gly)L)=20.58
Medium: 50% v/v dioxane/H2O
*******************************************************************************
C13H9N3O4S2           H2L                     CAS 2536-61-0  (4031)
1-(1',3'-Thiazol-2'-ylazo)-2-hydroxynaphthalene-6-sulfonic acid;
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Pd++       gl  alc/w  25°C  50%  U  I     K1=13     B2=19.4   1967NPb (84644) 581
Medium: 50% MeOH, 0.1 M NaClO4. In 0% MeOH: K1=13, K2=5.7
*******************************************************************************
C13H10NO2Cl            HL                      CAS 36016-24-7  (1818)
N-(4-Chlorophenyl)benzohydroxamic acid; C6H5.CO.N(C6H4Cl)OH
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Pd++       gl  diox/w 25°C  70%  U        K1=9.80   B2=18.21  1967JSa (84719) 582
Medium: 70% dioxan, 0.1 M KCl
*******************************************************************************
C13H10NO2Cl            HL                      CAS 78154-49-1  (5649)
N-3-Chlorophenylbenzohydroxamic acid;
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Pd++       gl  diox/w 25°C  50%  C    M   K1=11.47       2001AMc (84742) 583
                                         B(Pd(gly)L)=21.29
Medium: 50% v/v dioxane/H2O
*******************************************************************************
C13H10N2O2             HL                      CAS 56288-80-1  (4980)
2-Hydroxy-4-(phenylazo)benzaldehyde; C6H5.N:N.C6H3(OH).CHO
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Pd++       sp  alc/w  30°C  50%  U        B2=7.64        1972DTb (84840) 584
*******************************************************************************
C13H10N2O5S           H2L                     CAS 98789-35-6  (5012)
4-Hydroxy-3-formylazobenzene-4'-sulfonic acid;
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Pd++       sp  oth/un 30°C   aq  U        B2=7.22        1972DTb (84923) 585
*******************************************************************************
C13H10N4O4S           H2L                       (6644)
4-Hydroxy-3-(1H-imidazol-2-ylazo)-2-naphtalenesuphonic acid;
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
```

Pd++ sp NaClO4 25°C 0.50M U K1=15.53 1992VMa (84960) 586
For -3-ylazo analogue: K1=10.22; for 3,3-bis(1H-pyrazol-3-ylazo) analogue: K1=10.99
****
C13H10N4S HL CAS 3788-81-6 (4014)
2-Picolinylaldehyde 2-benzothiazolylhydrazone;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl diox/w 25°C 50% U K1=10.33 1965HRa (84967) 587
****
C13H10O2S H2L CAS 88220-26-2 (6572)
3-(1-Naphthyl)-2-mercaptopropenoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp NaClO4 25°C 0.10M C K1=15.56 B2=26.40 1989IBb (84976) 588
Medium: Aqueous 0.1 M NaClO4 containing 1-2% EtOH.
****
C13H11NO2 HL CAS 304-88-1 (181)
N-Phenylbenzohydroxamic acid; C6H5.CO.N(C6H5).OH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ EMF diox/w 25°C 70% U K1=10.11 B2=18.85 1967JSb (85171) 589
Medium: 70% dioxan, 0.1 M KCl
****
C13H11N3O6S H2L (2811)
1-(2-Carboxy-5-sulfonatophenyl)-3-hydroxy-phenyltriazene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp none 25°C 0.0 U K1=10.398 1974CHa (85304) 590
****
C13H12N2S HL CAS 156873-11-9 (8362)
2-[[1-(2-Pyridinyl)ethylidene]amino]benzene thiol;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ dis NaCl 25°C 2.0M C 1998BMd (85391) 591
K(Pd+2HL(org)=PdL2(org)+2H)=2.9. Method: extraction into CHCl3.
****
C13H12N4S L Dithizone CAS 60-10-6 (1801)
Diphenylthiocarbazone; C6H5.NH.NH.CS.N:N.C6H5

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp NaClO4 25°C 0.10M U K1=11.39 B2=21.78 1973BSe (85471) 592
****

C13H13N3O HL (4018)
3-Hydroxy-1-(2'-methylphenyl)-3-phenyltriazene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KCl 25°C 0.10M U K1=11.70 B2=22.97 1964PSa (85508) 593
****
C13H13N3O HL CAS 5756-83-2 (4019)
3-Hydroxy-1-(4'-methylphenyl)-3-phenyltriazene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KCl 25°C 0.10M U K1=11.89 B2=23.35 1964PSa (85514) 594
****
C13H13N3O2 HL CAS 5756-89-8 (4021)
3-Hydroxy-1-(4'-methoxyphenyl)-3-phenyltriazene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl diox/w 25°C 70% U K1=12.06 B2=23.74 1965PSb (85522) 595
Medium: 70% dioxan, 0.1 M KCl
****
C13H20N2O2 L Procaine CAS 59-46-1 (4029)
2-(Diethylamino)ethyl 4-aminobenzoate; H2N.C6H4.CO2.CH2.CH2.N(C2H5)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp oth/un 25°C ? U B2=7.88 1968SPd (86097) 596
****
C13H22N2O8 H4L CAS 1798-14-7 (921)
(Pentamethylenedinitrilo)tetraethanoic acid; ((HOOC.CH2)2N.CH2.CH2)2CH2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl oth/un 20°C 1.00M C K1=26.4 1976AMa (86203) 597
Medium: NaBr/NaClO4. Corrected for PdBrx complexes
****
C13H22N4O3S L Ranitidine CAS 66357-35-5 (7144)
N(2-(5-Dimethylaminomethyl)-2-furanylmethyl)thioethyl-N-methyl-2-nitro-1-ethenediam
ine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl NaCl 25°C 0.10M U K1=9.97 1995CCa (86332) 598
B(PdH-1L)=2.41
B(PdH-2L)=-6.88
****
C13H26O4S2 L (6656)
1,5-Dithia-8,11,14,17-tetraoxacyclononadecane, 1,5-Dithia-19-crown-6;

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       ix  none   25°C  0.0  U        K1=29.8        1991BTa (86462) 599
*************************************************************************
C13H32N4               L                      (7403)
2,5,9,12-Tetramethyl-2,5,9,12-tetraazatridecane;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       gl  R4N.X  25°C 0.10M C        K1=28.3        1998BBa (86579) 600
                                         K(PdL+H+Cl)=3.6
                                         B(PdH-1L)=16.9
                                         K(PdL+OH)=2.4
Medium: 0.1 M Me4NCl
*************************************************************************
C14H9NO3               HL                     CAS 116-85-8  (1020)
1-Amino-4-hydroxyanthraquinone;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       sp  alc/w  20°C  50%  U        K1=14.21  B2=23.66  1990ISa (86796) 601
                                         K(Pd+HL)=5.71
                                         K(Pd(OH)2L)=31.81
Medium: 50% EtOH/H20, 0.1 M NaClO4
*************************************************************************
C14H10O4              H2L                     CAS 482-05-3  (8247)
Diphenyl-2,2'-dicarboxylic acid; diphenic acid;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       gl  diox/w 30°C  50%  U T H    K1=7.00   B2=13.24  1978SJc (86933) 602
Medium: 50% dioxane/H2O, 0.10 M NaClO4.  At 40 C, K1=6.52, K2=5.52.
DH and DS values reported.
*************************************************************************
C14H12Cl2S2            L                      CAS 33451-44-4  (5055)
1,2-Bis(4-chlorophenylthio)ethane; Cl.C6H4.S.CH2.CH2.S.C6H4.Cl
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       sp  alc/w  25°C 100%  U    M                  1969CCb (87034) 603
                                         K(PdI4+L=PdLI2+2I)=-0.68
*************************************************************************
C14H12NO2Cl            HL                     CAS 67055-92-9  (6301)
N-(3-Chlorophenyl)-4-methylbenzohydroxamic acid; CH3.C6H4.CO.N(C6H4Cl)OH
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       gl  diox/w 25°C  50%  C    M   K1=11.65       2001AMc (87066) 604
                                         B(Pd(gly)L)=21.66
Medium: 50% v/v dioxane/H2O
```

Pd++ gl diox/w 25°C 50% U K1=9.94 B2=18.79 1989PMb (87067) 605

Pd++ gl diox/w 25°C 50% U K1=10.05 B2=19.15 1989PMb (87068) 606
Data also for 4-fluoro, 4-chloro, 4-bromo, 4-nitro and 4-methoxy analogues
****
C14H12NO3Cl HL CAS 67135-47-1 (9106)
N-(3-Chlorophenyl)-N-hydroxy-4-methoxybenzamide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl diox/w 25°C 50% C M K1=11.82 2001AMc (87097) 607
B(Pd(gly)L)=22.06
Medium: 50% v/v dioxane/H2O
****
C14H12N4O2Br2 HL CAS 72833-87-5 (2533)
2-(2-(3,5-Dibromopyridyl)azo)-5-dimethylaminobenzoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp diox/w 25°C 40% C K1=10.36 1986KHa (87319) 608
****
C14H13NO2 HL CAS 1503-92-0 (1817)
N-(4-Tolyl)benzohydroxamic acid; C6H5.CO.N(C6H4.CH3).OH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl diox/w 25°C 70% U K1=10.34 B2=19.19 1969JSa (87450) 609
****
C14H13NO2 HL CAS 1143-74-2 (4044)
N-2-Tolylbenzohydroxamic acid; C6H5.CO.N(C6H4.CH3).OH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ oth diox/w 25°C 70% U K1=19.02 1968JSc (87482) 610
****
C14H13N3O2 HL (4045)
1-(4'-Acetylphenyl)-3-hydroxy-3-phenyltriazene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl diox/w 25°C 70% U K1=10.97 B2=21.51 1964PSe (87594) 611
Medium: 70% dioxan, 0.1 M KCl
****
C14H13N5OS HL (5394)
1-(2-Pyridylmethylideneamino)-3-(salicylideneamino)thiourea;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp mixed 25°C 40% U 1985RGa (87617) 612

K1eff=5.57

Medium: 40% DMF, pH 4.5

****

C14H13N5O2 HL (5393)

1-(2-Pyridylmethylideneamino)-3-(salicylideneamino)urea;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	mixed	25°C	32%	U			1985RGa (87624)	613

K1eff=5.38

Medium: 32% DMF, pH 4.5

****

C14H14N4OBr2 HL CAS 35601-32-2 (5092)

5-(3,5-Dibromo-2-pyridylazo)-2-ethylamino-4-hydroxy-1-methylbenzene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	?	?	U		K1=6.94	1967GUa (87688)	614

****

C14H14S2 L CAS 42311-15-9 (5031)

1,2-Bis(phenylthio)ethane; C6H5.S.CH2.CH2.S.C6H5

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	alc/w	25°C	100%	U	M		1969CCb (87708)	615

K(PdI4+L=PdLI2+2I)=0.72

****

C14H15N4OBr HL CAS 14337-50-9 (5095)

5-(5-Bromo-2-pyridylazo)-2-ethylamino-4-hydroxy-1-methylbenzene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	?	?	U			1967GUa (87768)	616

K(?)=7.35

****

C14H16N2O2S2 L CAS 729600-10-6 (9255)

2,3,5,6,8,9-Hexahydro[1,4,7,10]dioxadithiacyclododecino[2,3-b]quinoxaline;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	nmr	mixed	25°C	60%	C		K1=4.20	2004HHa (87879)	617

Method: 1H nmr. Medium: 60% CD2Cl2/CD3CN.

****

C14H16N2O2S2 L CAS 729600-11-7 (9256)

2,3,5,6,8,9-Hexahydro[1,4,7,10]dioxadithiacyclododecino[8,9-b]quinoxaline;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	nmr	mixed	25°C	60%	C		K1=3.61	2004HHa (87880)	618

Method: 1H nmr. Medium: 60% CD2Cl2/CD3CN.

****

C14H16N2O4S H2L Dansyl-Gly CAS 1091-85-6 (5845)
N-Dansylglycine, (5-Dimethylamino)naphthalene-1-sulfonoglycine;
(CH3)2N.C10H6.SO2.NH.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	vlt	NaClO4	25°C	0.10M	U		K1=17.8 B2=21.8 B(PdL(OH))=21.6 Beff(PdH-2L2)=21.8 Beff(PdH-2L2(OH))=21.6	1990GBb (87901)	619

****

C14H18N4 L DPEN CAS 4608-34-3 (1850)
N,N'-Bis-(2-pyridylmethyl)-1,2-diaminoethane; (C5H4N.CH2.NH.CH2)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	25°C	1.00M	C		K1=35.6	1985YAa (88117)	620

Medium: NaBr

****

C14H23N3O10 H5L DTPA CAS 67-43-6 (238)
Diethylenetriamine-pentaethanoic acid; HOOC.CH2.N(CH2.CH2.N(CH2.COOH)2)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaClO4	20°C	1.00M	U	M	K1=29.7 K(PdL+H)=3.49 K(PdHL+H)=2.93 K(PdH2L+H)=2.56 K(PdH3L+H)=1.93	1976AMa (89356)	621

K(PdL+SCN=PdL(SCN))=1.45;K(PdL+Br=PdBr)=-1.K1 in NaBr by exchange with PdBr4

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	EMF	oth/un	25°C	0.20M	U		K1=24.60	1972KIa (89357)	622

****

C14H24N2O8 H4L HMDTA CAS 1633-00-7 (920)
1,6-Diaminohexane-N,N,N',N'-tetraethanoic acid; ((HOOC.CH2)2N.CH2.CH2.CH2)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	NaClO4	20°C	0.10M	U	I	K(PdCl+HL)=17.3 B(PdClL(OH))=39.72 K(PdClL+OH)=15.60 K(PdClL+2OH)=28.35	1983KVa (89596)	623

B(Pd(OH)ClL)=43.72; B(Pd2Cl2(OH)2L)=57.43. Data also at 1.0 M

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	oth/un	20°C	1.00M	C		K1=26.3	1976AMa (89597)	624

Medium: NaBr/NaClO4. By exchange with PdBr4

****

C14H26N2O8 H2L (6658)

1,4,10,13-Tetraoxa-7,16-diaza-2,3-dicarboxycyclooctadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	R4N.X	25°C	0.10M	U		K1=8.5 B(PdHL)=15.6	1990AFa (90224)	625

****

C14H28N6O4 H2L (832)
N,N,N',N'-Tetrakis(2-carbamoylethyl)diaminoethane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaClO4	25°C	0.10M	C		K(Pd+H2L)=11.24 K(Pd+H2L=PdHL+H)=8.35 K(Pd+H2L=PdL+2H)=4.37 K(PdH2L=PdHL+H)=-2.89 K(PdHL=PdL+H)=-3.98	1986HPa (90505)	626

****

C14H34N4 L (7402)
2,6,9,13-Tetramethyl-2,6,9,13-tetraazatetradecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	R4N.X	25°C	0.10M	C		K1=22.95 K(PdL+H+Cl)=9.30 B(PdH-1L)=13.96 K(PdL+OH)=4.82 K(PdClHL+H+Cl=PdCl2H2L)=4.52	1998BBa (90834)	627

Medium: 0.1 M Me4NCl

****

C14H35N7 L CAS 296-85-5 (9052)
1,4,7,10,13,16,19-Heptaazacycloheneicosane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaCl	25°C	0.50M	C	H	K1=24.55 B(PdHL)=34.92 B(PdH2L)=42.63 B(PdH3L)=47.13 B(Pd2LCl)=>52	1992BBf (90857)	628

By calorimetry: DH(PdCl4+H7L)=-6.3 kJ mol-1.

****

C14H37N7 L CAS 298-85-5 (5606)
1,4,7,10,13,16,19-Heptaazacycloheneicosane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	cal	NaCl	25°C	0.50M	U	HM		1993BBa (90917)	629

DH(2PdCl4+L=Pd2LCl2+6Cl)=-119.2 kJ mol-1

****
C15H10N3OBr HL (5128)
4-(5-Bromo-2-pyridylazo)-1-hydroxynaphthalene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ dis NaCl ? ? U 1967GVc (90944) 630
K(Pd+HL=PdL+H)=7.05
****
C15H12N4 L (4056)
2-Picolinealdehyde 2'-quinolylhydrazone; C5H4N.CH:N.NH.C9H6N

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl diox/w 25°C 50% U K1=10.57 1965HRa (91454) 631
****
C15H14NO3Cl HL CAS 113581-14-9 (9105)
N-(3-Chlorophenyl)-4-ethoxy-N-hydroxybenzamide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl diox/w 25°C 50% C M K1=11.91 2001AMc (91706) 632
B(Pd(gly)L)=22.34
Medium: 50% v/v dioxane/H2O
****
C15H16N2O2 HL CAS 7397-15-1 (6853)
Peonolphenylhydrazone;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl diox/w 20°C 75% U T K1=13.27 B2=26.05 1991NNa (91927) 633
30 C: K1=13.08, K2=12.42; 40 C: K1=12.92, K2=12.38
****
C15H16N4OBr2 HL CAS 14337-54-3 (993)
2-(3,5-Dibromo-2-pyridylazo)-5-diethylaminophenol;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp oth/un ? ? U 1967GVb (91942) 634
K(Pd+HL=PdL+H)=6.3
****
C15H16S2 L CAS 42837-97-3 (5105)
1,3-Bis(phenylthio)propane; C6H5.S.CH2.CH2.CH2.S.C6H5

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp alc/w 25°C 100% U M 1969CCa (91967) 635
K(PdI4+L=PdLI2+2I)=-1.18
Medium: CH3OH.
****

C15H17N4OBr HL CAS 14357-53-2 (712)
2-(5-Bromo-2-pyridylazo)-5-diethylaminophenol; BrC5H3N.N:N.C6H3(OH)N(CH3)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	?	?	U			1967GVb (91982)	636
							K(Pd+HL=PdL+H)=7.0		

****
C15H18N2O2S2 L CAS 729600-13-9 (9258)
2,3,6,7,9,10-Hexahydro-5H-[1,4,7,11]dioxadithiocyclotridecino[2,3-b]quinoxalene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	nmr	mixed	25°C	60%	C		K1=3.53	2004HHa (92008)	637

Method: 1H nmr. Medium: 60% CD2Cl2/CD3CN.
****
C15H18N4O HL CAS 14337-52-1 (5124)
5-Diethylamino-2-(2-pyridylazo)phenol;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	?	?	U			1967GVa (92098)	638
							K(?)=6.0		

****
C15H20N4 L DPTN CAS 63671-70-5 (1851)
N,N'-Bis-(2-pyridylmethyl)-1,3-diaminopropane; (C5H4N.CH2.NH.CH2)2CH2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	25°C	1.00M	C		K1=39.1	1985YAa (92185)	639

Medium: NaBr
****
C15H25N3O10 H5L (5127)
Diethylenetriamine-N,N,N",N"-tetraethanoic acid-N'-propanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	dis	NaCl	?	?	U			1967GVc (92380)	640
							K(Pd+HL=PdL+H)=6.57		

****
C15H37N5 L CAS 3803-11-2 (1798)
2,5,8,11,14-Pentamethyl-2,5,8,11,14-pentaazapentadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	R4N.X	25°C	0.10M	C	M	K1=21.41	1998BBa (92627)	641
							K(PdL+H)=8.68		
							K(PdHL+H+Cl)=5.76		
							B(PdH-1L)=10.95		
							K(PdL+OH)=3.4		

Medium: 0.1 M NMe4Cl

****

C16H11N2O7ClS2 H3L CAS 4768-88-1 (7743)
4-Chloro-phenylazo-R-acid, 1-(4-Chlorophenylazo)-2-naphthol-3,6-disulfonic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	25°C		C		K1eff=3.75 B2eff=8.55	1999HAa (92772)	642

Medium: Universal Buffer, pH 6.0

****

C16H12N2O4S H2L CAS 13964-82-4 (3475)
1-(4-Sulfophenylazo)-2-hydroxynaphthalene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	25°C	?	U		B2eff=9.8 (pH 4)	1968SDa (93003)	643

****

C16H12N2O11S3 H5L CAS 548-81-2 (5180)
2-(4'-Sulfophenylazo)chromotropic acid,
2-(4-sulfophenylazo)-1,8-dihydroxyaphthalene-3,6-diHSO3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	25°C	dil	C		B2eff=10.0 (pH 3.5) B3eff=15.0 (pH 10.5)	1985SSg (93099)	644

Medium: dilute buffer solution (not stated).

****

C16H13NO4S HL (5182)
N-4-Toluenesulfonyl-benzofur-2-yl-carboxamide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	EMF	alc/w	?	70%	U		B2=6.10	1971MSc (93160)	645

Medium: 70% MeOH

****

C16H13N2O10AsS2 H5L Thorin I CAS 3688-92-4 (2609)
1-((2-Arsonophenyl)azo)-2-hydroxy-3,6-naphthalyldisulfonic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	25°C	?	U		K1eff=4.4 (pH 3)	1964SDd (93205)	646

****

C16H14N4O2S HL CAS 83688-78-2 (2534)
2-(2-Benzothiazolylazo)-5-dimethylaminobenzoic acid;

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       sp  diox/w 25°C  40%  C        K1=9.37        1986KHa (93483) 647
*************************************************************************
C16H18S2               L                        (5144)
1,2-Bis(3-tolylthio)ethane; CH3.C6H4.S.CH2.CH2.S.C6H4.CH3
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       sp  alc/w  25°C 100%  U    M                  1969CCb (93901) 648
                                        K(PdI4+L=PdLI2+2I)=1.23
Medium: MeOH
*************************************************************************
C16H18S2               L                        (5145)
1,2-Bis(4-tolylthio)ethane; CH3.C6H4.S.CH2.CH2.S.C6H4.CH3
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       sp  alc/w  25°C 100%  U    M                  1969CCb (93902) 649
                                        K(PdI4+L=PdLI2+2I)=1.96
*************************************************************************
C16H22N4               L    DPTE             CAS 81747-99-1  (1852)
N,N-Bis-(2-pyridyl-methyl)-1,4-diaminobutane; (C5H4N.CH2.NH.CH2.CH2)2
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       sp  oth/un 25°C 1.00M C        K1=37.0        1985YAa (94183) 650
Medium: NaBr
*************************************************************************
C16H24N6O5             L    Pro-Gly-Ala-His    (7404)
Prolyl-glycyl-alanyl-histidine;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       gl  KNO3   25°C 0.20M U         K1=15.72       1997THa (94338) 651
                                        B(PdHL)=17.58
                                        B(PdH-1L)=11.95
Results confirmed by H nmr measurements.
*************************************************************************
C16H26N2O12          H4L                        (6659)
1,4,10,13-Tetraoxa-7,16-diaza-2,3,11,12-tetracarboxycyclooctadecane;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Pd++       gl  R4N.X  25°C 0.10M U         K1=12.1        1990AFa (94591) 652
                                        B(PdHL)=18.4
*************************************************************************
C16H26N2O12          H4L                    CAS 130190-52-2  (6660)
1,4,10,13-Tetraoxa-7,16-diaza-2,3,7,16-tetracarboxycyclooctadecane;
-------------------------------------------------------------------------
```

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	R4N.X	25°C	0.10M	U		K1=14.1 B(PdHL)=20.0	1990AFa (94605)	653

C16H29N3O8 H3L (6699)
1,7-Dioxa-4,10,13-triazacyclopentadecane-N,N',N"-triethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KCl	25°C	0.10M	C		K1=16.58 K(PdL+H)=4.88 K(PdHL+H)=2.18 B(Pd2L)=19.82 K(Pd(OH)L+H)=10.77	1993DSa (94977)	654

C16H40N8 L CAS 297-11-0 (5588)
1,4,7,10,13,16,19,22-Octaazacyclotetracosane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	cal	NaCl	25°C	0.50M	U	HM		1993BBa (95661)	655

DH(2PdCl4+L=Pd2LCl2+6Cl)=-118.8 kJ mol-1

C17H16N4O2S HL CAS 202867-34-3 (7313)
2-[2-(5-Methylbenzothiazolyl)azo]-5-dimethylaminobenzoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	alc/w	RT	16%	C		K1eff=6.88	1998FZa (96110)	656

Medium: 16% EtOH/H2O.

C17H20S2 L (5209)
1,3-Bis(3-tolylthio)propane; CH3.C6H4.S.CH2.CH2.CH2.S.C6H4.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	alc/w	25°C	100%	U	M	K(PdI4+L=PdLI2+2I)=-1.04	1969CCb (96359)	657

Medium: CH3OH.

C17H20S2 L (5210)
1,3-Bis(4-tolylthio)propane; CH3.C6H4.S.CH2.CH2.CH2.S.C6H4.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	alc/w	25°C	100%	U	M	K(PdI4+L=PdLI2+2I)=-0.77	1969CCb (96360)	658

C17H24N4 L CAS 49764-71-3 (5757)
N,N'-Bis((2-pyridyl)methyl)-1,5-pentanediamine; C5H4N.CH2.NH.(CH2)5.NH.CH2.C5H4N

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	25°C	1.00M	C	I M	K1=34.7	1985YAa (96436)	659

Medium: NaBr. Ternary complex with Br-

****

C18H15O3PS HL CAS 16704-71-5 (3365)
3-Diphenylphosphino-benzene sulfonic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	ISE	NaClO4	25°C	1.0M	U		K1=10.2 B2=20.00 K3=6.3 K4=4.9	1972CBa (97110)	660

****

C18H15P L CAS 603-35-0 (621)
Triphenylphosphine; (C6H5)3P

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	vlt	non-aq	20°C	100%	C		K(Pd(Ph)L2+Cl)=4.28 K(Pd(Ph)L2+Br)=3.56 K(Pd(Ph)L2+I)=3.23 K(Pd(Ph)L2+acetate)=2.88	1998ACd (97144)	661

Medium: DMF. Method: chronoamperometry.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	kin	non-aq	25°C	100%	U	T HM	K(PdABL+L=PdAL2+B)=2.39	1988JHc (97145)	662

Medium: acetonitrile. A=2,5-dioxo-3,6-dichloro-1,4-benzoquinone, B=CH3CN
Data also at 30, 35, 40, 45 C

****

C18H18N2O2S2 L CAS 729600-12-8 (9257)
2,3,5,6,8,9-Hexahydrobenzo[g][1,4,7,10]dioxadithiacyclododecino[2,3-b]quinoxaline;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	nmr	mixed	25°C	60%	C		K1=3.82	2004HHa (97229)	663

Method: 1H nmr. Medium: 60% CD2Cl2/CD3CN.

****

C18H26N4 L CAS 80284-81-7 (5758)
N,N'-Bis((2-pyridyl)methyl)-1,6-hexanediamine; C5H4N.CH2.NH.(CH2)6.NH.CH2.C5H4N

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	sp	oth/un	25°C	1.00M	C		K1=34.7	1985YAa (97679)	664

Medium: KBr. K is only a limiting value

****

C18H30N4O12 H6L TTHA CAS 869-52-3 (694)
Triethylenetetraaminehexaethanoic acid;((HOOC.CH2)2N.CH2.CH2.N(CH2.COOH).CH2)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaClO4	25°C	0.5M	C		K1=18.73	1984NAb (98082)	665
							K(PdL+H)=6.92		
							K(PdH2L+H)=2.50		
							K(PdHL+H)=2.90		
							K(PdH3L+H)=2.45		

K(2Pd+L)=27.50; K(Pd2L+H)=3.20
K(Pd2HL+H)=2.0

****

C18H40N4O4 L CAS 89066-60-2 (867)
N,N',N",N"'-Tetrakis(2-hydroxyethyl)-1,4,8,11-tetraazacyclotetradecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	NaClO4	25°C	0.10M	C		K1=18.32	1987HPa (98924)	666

****

C18H44N6 L (7252)
2,5,8,11,14,17-Hexamethyl-2,5,8,11,14,17-hexaazaoctadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	R4N.X	25°C	0.10M	C	M		1998BBa (98955)	667
							B(PdHL)=30.83		
							K(PdHL+H)=7.16		
							B(PdH-1L)=10.75		
							B(Pd2LCl2)=44.0		

Medium: 0.1 M NMe4Cl. B(Pd2H-1LCl)=33.9, K(Pd2LCl2+H+Cl)=5.8

****

C19H14O7S H4L Pyrocatechol Vi CAS 369596-29-2 (709)
Pyrocatechol Violet,
3-[3,4-Dihydroxyphenyl-3-hydroxy-4-oxo-2,5-cyclohexadien-1-ylidenemethyl-b.;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Pd++	gl	KNO3	25°C	0.10M	U			1997USa (99112)	668
							K(Pd+H2L)=8.29		
							K(Pd+HL)=13.67		
							K(PdL+OH)=3.60		
							K(2Pd+HL=Pd2L+H)=15.91		

K(Pd2L+OH)=8.25.

****

C19H24N2OS L (2547)
10-(3-Dimethylamine-2-methyl-propyl)-2-methoxyphenothiazine;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo

Pd++ sp KCl 25°C 1.00M U K1=4.32 1978JOa (99349) 669
****
C21H17N2O3P L CAS 215457-01-5 (8001)
Diphenyl-3-(4-methoxyphenylsydnonyl)phosphine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp non-aq 25°C 100% C 2001LPb (101075) 670
K(PdLCl2+benzylamine)=-0.49
K(PdLCl2+dibenzylamine)=-0.38
K(PdLCl2+diethylamine)=-0.44
K(PdLCl2+triethylamine)=-0.69
Medium: CH2Cl2. Also data for dimethylamine, 2-aminopyridine, 4-anisidine, pyridine, 4-toluidine and aniline.
****
C21H18N4O6S H2L CAS 86170-15-2 (8412)
2-[5-(2-Methoxy-5-sulfophenyl)-3-phenyl-1-formazano]-benzoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp NaClO4 26°C 0.10M C K1=14.90 1983UCa (101119) 671
For the ligand, K1=14.4, K2=3.6.
****
C21H21P L CAS 6163-58-2 (600)
Tri(2-methylphenyl)phosphine (or 4-methyl where indicated); (CH3.C6H4)3P

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp non-aq 25°C 100% U TIHM 1981MKa (101193) 672
K(PdA2+L)=3.14
Medium: benzene. HA = trifluoroacetylacetone
****
C21H22N4O HL CAS 56932-30-0 (5308)
1-Hydroxy-2-(2-N-methylanabasinyl-alpha-azo)naphthalene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp oth/un ? ? U B2=10.53 1966APa (101203) 673
****
C22H26N3OF3S L Fluphenazine CAS 146-56-5 (2548)
10-[3]-4-(2-Hydroxyethyl)piperazine-1-yl-propyl-2-trifluoromethylphenothiazine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp KCl 25°C 1.00M U K1=5.13 1978JOa (101926) 674
****
C23H16O9Cl2S H4L Chrome azurol S CAS 1667-99-8 (711)
Chromazurol S;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo

---
Pd++ sp KCl 25°C 0.10M C K1=6.36 1975ISa (102565) 675

Pd++ sp NaNO3 25°C 0.10M U 1972MSd (102566) 676
B(Pd2L)=9.80
B(Pd2L2)=15.27
K(Pd+HL)=4.90

Pd++ sp oth/un 25°C ? U 1963SDc (102567) 677
K(?)=4.8
****
C23H18O9S H4L Eriochrome cyan CAS 3564-18-9 (433)
4'-Hydroxy-3,3'-dimethyl-2''-sulfofuchsone-5,5'-dicarboxylic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp oth/un 25°C ? U 1970SMd (102634) 678
K2eff=5.0 (pH=4.5)
****
C23H31N3O4 H2L (7088)
1,4,7-Trimethyl-1,7-bis(4-carboxybenzyl)-1,4,7-triazaheptane;
CH3N(CH2CH2N(CH3)CH2C6H4COOH)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl NaCl 25°C 0.15M C M 1995BBc (102773) 679
B(PdLCl)=19.10
B(PdHLCl)=23.15
K(PdLCl+H)=4.05
****
C24H23N9O2 HL (5330)
1,5-Bis(4-antipyrinyl)-3-cyanoformazan;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp NaClO4 25°C 0.10M U K1=28.1 1971BSf (102934) 680
****
C26H25NO9S H4L Semi-Xylenol O (426)
3-(N,N-Di(carboxymethyl)aminomethyl)-2-cresolsulfonephthalein;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp KNO3 25°C 0.10M C I 1991HKg (103948) 681
B(Pd2L)=26.62
****
C27H29NO11 L Adriamycin CAS 25316-40-9 (2407)
Doxorubicin;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---

Pd++ gl oth/un 25°C 0.10M U 1986FGa (104461) 682
K(Pd+HL=0.5(PdL)2)=22.1
Medium not stated.
****
C30H50N6 L (7089)
1,4,7,16,19,22-Hexamethyl-1,4,7,16,19,22-hexaaza[9.9]paracyclophane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl R4N.X 25°C 0.10M C 1999BBd (105354) 683
B(PdH2LCl)=37.44
B(Pd2LCl2)=42.9
B(Pd2HLCl3)=47.3
Medium: NMe4Cl. Additional method: 1H and 13C nmr.
****
C31H32N2O13S H6L Xylenol orange CAS 63721-85-5 (432)
5,5'-Bis-N,N-bis(carboxymethyl)aminomethyl-4'-hydroxy-3,3'-dimethylfuchsone-2"-sulf
onic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ sp oth/un 25°C ? U 1963OTa (105488) 684
K(?)=10.3
****
C32H44N10O4 L CAS 702699-42-1 (9126)
2,9-Di[4-(1,4,7,10-tetraazacyclotridecane-11,13,-dione)methyl]-1,10-phenanthroline;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl KNO3 25°C 0.10M U 2004GLa (105774) 685
B(PdH2L)=19.82
B(Pd2L)=15.83
B(Pd3H-2L)=9.93
B(Pd3H-3L)=-3.52
B(Pd3H-4L)=-13.72.
****
C35H57N5O4 L CAS 160320-59-2 (7393)
1,4,7-Trimethyl-19,22,28,31-tetraoxa-1,4,7,124,23-pentaaza[9.25]-4-cyclophane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Pd++ gl R4N.X 25°C 0.10M C 1999BBd (106212) 686
B(PdLCl)=23.7
B(PdHLCl)=31.1
B(PdH2LCl)=36.7
K(PdLCl+H)=7.4
Medium: NMe4Cl. Additional method: 1H and 13C nmr. K(PdHLCl+H)=5.6.

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EXPLANATORY NOTES

   DATA Flags are :-

        T Data at other TEMPERATURES
        I Data with various BACKGROUNDS
        H Data for THERMOCHEMICAL quantities
        M Data for TERNARY Complexes

   EVALUATION Flags are :-

        T or IUP=T signifies EVALUATION RATING = Tentative by IUPAC

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