SC-Database
Software version = 5.81 Data version = 4.62
Experiment list contains 778 experiments for
 (no ligands specified)
 Metal : Er+++
 (no references specified)
 (no experimental details specified)

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

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ oth none 25°C 0.0 U 1974JOb (455) 1
K(Er+3e=Er(s))=-118.7((-2.34V)
K(Er+e=Er(II))=-51(-3.0V)
Method: literature evaluated data

Er+++ oth none 25°C 0.0 U 1952LAb (456) 2
K(Er+3e)=-116.4(-2300 mV)
****
AsO4--- H3L Arsenate CAS 7778-39-4 (1557)
Arsenate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ sol none 25°C 0.0 C 1992FIa (1138) 3
Kso(ErAsO4)=-22.47
Equilibrium monitored by EDTA and iodine titrations.
****
Br- HL Bromide CAS 10035-10-6 (19)
Bromide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ sp non-aq 25°C 100% U K1=0.7 1974KBb (1902) 4
Medium: propanol, 1 M LiClO4. K1=0.5 to 0.9

Er+++ sp alc/w 25°C 50% U I K1=-0.15 1973KPe (1903) 5
Medium: 50% w/w MeOH/H2O, 3 M LiClO4. K1=-0.48(0%), 0.52(90%)

Er+++ sp oth/un 22°C var U K1=-0.58 B2=-2.97 1965MSf (1904) 6
Medium:LiBr var
****
CO3-- H2L Carbonate CAS 465-79-6 (268)
Carbonate;

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

```
Er+++      gl  NaClO4 25°C 0.70M C        K1=5.87        2004LBb  (3197)   7
                                         K(Er+HCO3=ErHCO3)=1.44
Medium: 0.70 m NaClO4. Calculated for I=0, K1=7.61, B2=13.12,
K(Er+HCO3=ErHCO3)=2.49, K(Er+HL=ErL+H)=-2.72, K(Er+2HL=ErL2+2H)=-7.54
-------------------------------------------------------------------------------
Er+++      dis NaClO4 25°C 0.70M C  I     K1=5.88   B2=10.60  1998LBb  (3198)   8
Method: H2O/tributylphosphate distribution and ICP-mass spectrometry.
Values calculated for I=0.0 M, K1=7.86, B2=13.68.
-------------------------------------------------------------------------------
Er+++      gl  KCl    25°C 0.20M M T H    K1=8.51        1991BPb  (3199)   9
                                         K(Er+OH+L)=15.43
DH(K1)=-101 kJ mol-1, DS(K1)=-175 J K-1 mol-1.
Also data for 35, 45 and 55 C.
-------------------------------------------------------------------------------
Er+++      sol none   25°C  0.0  C                      1986FMa  (3200)  10
                                         Kso(Er2(CO3)3)=-28.25
-------------------------------------------------------------------------------
Er+++      sol none   25°C  0.0  C                      1986HMa  (3201)  11
                                         Kso(Er2(CO3)3)=-28.25
Method: spectrophotometry.
-------------------------------------------------------------------------------
Er+++      sp  NaNO3  25°C  2.5M C                      1979DBa  (3202)  12
                                         B(Er(CO3)4)=16.92
                                         B(Er(edta)CO3)=19.61
Method: by competition with edta
-------------------------------------------------------------------------------
Er+++      dis oth/un 20°C  2.5M C                      1979DBb  (3203)  13
                                         B4=15.69
Media: 2.5 M (NH4)2NO3/hexane. Analysis by NAA. By competition with edta;
K1(Er(edta))=18.87 recalculated for I=2.5 from J.Am.Chem.Soc.,75 1953,4196
-------------------------------------------------------------------------------
Er+++      sol oth/un 25°C  var  U  I                   1964FDa  (3204)  14
                                         Kso(Er2L3(H2O)3)=-22.9
                                         B3=10.60
Medium: K2CO3. In 7 M KCl: K(ErL3+2F=ErL2F2+L)=0.89
*******************************************************************************
C6N6Fe---             H3L    Ferricyanide       (2491)
Hexacyanoferrate (III); Fe(III)(CN)6---
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Er+++      cal none   25°C 0.00  M   H    K1=3.68        1972SCd  (3642)  15
DH(K1)=4.4 kJ mol-1, DS=84.9 J K-1 mol-1
*******************************************************************************
Cl-                    HL    Chloride         CAS 7647-01-0  (50)
Chloride;
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Er+++      dis NaCl   25°C  1.0M C        K1=-0.13       1997HTb  (4794)  16
```

Method: by solvent extraction from 1.0 M NaCl into CHCl3, 0.1 M 1,1,1-trifluoro-4-(2-thienyl)-2,4-pentanedione.

Er+++ cal non-aq 25°C 100% U H K1=2.47 B2=4.89 1991ITa (4795) 17
K3=1.81
K4=1.41
Medium: DMF, 0.2 M Et4NClO4. DH(K1)=22.2 kJ mol-1, DH(K2)=24.2, DH(K3)=21 DH(K4)=35. DS(K1)=122, DS(K2)=127, DS(K3)=106 J K-1 mol-1

Er+++ sol NaClO4 25°C ? U K1=0.26 1982MAa (4796) 18

Er+++ cal non-aq 25°C 100% U K1=2.31 B2=4.07 1980VCa (4797) 19
Medium: dimethylacetamide

Er+++ sp non-aq 25°C 100% U K1=0.04 1974KBb (4798) 20
Medium: propanol, 1 M LiClO4

Er+++ sp alc/w 25°C 95% U I K1=-0.30 1972DLa (4799) 21
Medium: 95% w/w MeOH/H2O, 2 M LiClO4. K1=-0.7(90%). 20-25 C

Er+++ sp alc/w 25°C 50% U I K1=0.41 1971KBf (4800) 22
K1in=-0.96
Medium: 50% w/w MeOH/H2O, 3 M LiClO4. K1=-0.08(0%); K1=0.71,K1in=-0.33(100%)

Er+++ sp alc/w 25°C 50% U I K1=0.43 1971KBg (4801) 23
K1in=-0.82
Medium: 50% v/v EtOH/H2O,3 M LiClO4. K1=0.28(v=25); K1=0.57,K1in=-0.55(75%); K1=0.75, K1in=-0.25(90%); K1=0.79, K1in=-0.18(100%)

Er+++ sp oth/un 22°C 0.0 U K1=-1.93 1966MSf (4802) 24

Er+++ sol none 25°C 0.0 U 1960ASd (4803) 25
Kso(Er(OH)2Cl)=-17.6
Kso(Er(OH)2.5Cl0.5)=-21.9
I=0 corr. Unstable.

****

ClO4- HL Perchlorate CAS 7001-90-3 (287)
Perchlorate;

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

---

Er+++ sp alc/w 25°C 50% U K1=0.60 1974SIa (6218) 26

Er+++ sp alc/w 25°C 50% U K1=0.6 1974SIa (6219) 27
K1in=0.5
Medium: 50% w/w MeOH/H2O

****

F- HL Fluoride CAS 7644-39-3 (201)
Fluoride;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	ix	oth/un	25°C	0.02M	C	T H	K1=3.77	B2= 5.94	2004LMa (6834)	28

Medium: 0.025 M HNO3. Applying Pitzer parameters: at I=0, K1=9.83.
Data for 5 to 45 C. DH(K1)=10.0 kJ mol-1, DH(B2)=20.8.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	ISE	NaClO4	25°C	0.0	C	I	K1=4.27		2000LBa (6835)	29

Method: Fluoride ISE. Values calc. from data for I=0.015-0.70 M NaClO4.
At I=0.70 M, K1=3.347.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	ix	KNO3	25°C	0.02M	C		K1=3.72	B2= 6.25	1999SBc (6836)	30

Medium: 0.025 M HNO3. Additional method: ICP-MS.
Assumed K1(HF) = 3.03, derived from literature values.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	ISE	none	25°C	0.0	C	H	K1=3.39	B2=7.03	1989MJa (6837)	31
							Kso=-11.10			

Also by conductivity and radiometry. DH(Kso)=34.2 kJ mol-1; DS=-217.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	ISE	R4N.X	25°C	0.50M	C		K1=3.39	B2=7.03	1989MJb (6838)	32

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	cal	NaClO4	25°C	1.00M	C	H			1988GBa (6839)	33

DH(K1)=10.6 kJ mol-1; DS(K1)= 103 J mol-1 K-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	ISE	NaCl	25°C	1.00M	C		K1=3.146		1985BBb (6840)	34

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	sol	none	25°C	0.0	C	T H	K1=4.52		1985MEc (6841)	35
							Kso(ErF3)=-17.5			

Method: radiometric determination of 169Er. From conductivity measurements
at 25-50 C, DH(Kso)=34 kJ mol-1, DS(Kso)=-217 J K-1 mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KCl	25°C	1.00M	U	M			1981KTb (6842)	36
							K(ErEDTA+F)=1.82			
							K(Er(EDTA)F+F)=0.30			

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaCl	25°C	1.00M	U		K1=3.13	B2=5.35	1979BHa (6843)	37

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	EMF	NaClO4	25°C	0.50M	U		K1=3.54		1968IZa (6844)	38
							K(Er+HF=ErF+H)=0.61			

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	EMF	NaClO4	25°C	1.0M	U	H	K1=3.54		1967WCa (6845)	39

By distribution: K1=3.56. By calorimetry: DH(K1)=31.1 kJ mol-1, DS=172.2

****

H2PO2- HL Hypophosphite CAS 6303-21-5 (6304)
Hypophosphite;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	sp	oth/un	?	var	U		K1=1.47		1970PLe (7643)	40

****

IO3- HL Iodate CAS 7782-68-5 (1257)

Iodate;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	dis	NaClO4	25°C	0.10M	U		K1=1.26		1973CBd (8510)	41
Er+++	sol	oth/un	25°C	0.0	U				1966FPb (8511)	42
							Kso=-10.41			

****

IO4- HL Periodate CAS 13444-71-8 (6063)
Periodate;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	sol	oth/un	25°C	dil	U				1974LOa (8602)	43
							Kso(Er(H2IO6)(H2O)3)=-9.27			

****

MoO4-- H2L Molybdate (443)
Molybdate;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	con	oth/un	25°C	.001M	U		K1=4.26		1968DKc (8728)	44

****

Mo12O42U-------- H8L (2922)
Uranium-12-molybdate;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	oth/un	20°C	0.10M	U				1989SBb (8772)	45
							B(ErHL)=8.06			
							B(Er2L)=7.25			
							B(ErH2L)=10.19			

****

NO3- HL Nitrate CAS 7697-37-2 (288)
Nitrate;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	cal	NaClO4	25°C	2.0M	C	IH	K1=-0.96		1998BMb (9650)	46

DH(K1)=10.7 kJ mol-1. From Pitzer extrapolation to I=0.0, K1=-0.19, DH(K1)=9.6 kJ mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	dis	none	25°C	0.0	U		K1=0.95		1992MSb (9651)	47
Er+++	sp	alc/w	25°C	0.64M	U	TI	K1=1.91	B2=3.17	1990SBd (9652)	48
							K3=0.44			

Medium: MeOH/H2O, MeOH mole fraction 0.64, electrolyte ClO4. Data also at 15, 20, and 37 C, and at several MeOH/H2O ratios.

```
Er+++      sp  non-aq 25°C 100%  U        K1=0.6         1974KBb  (9653)  49
Medium: PrOH, 1 M LiClO4
--------------------------------------------------------------------------------
Er+++      oth oth/un 25°C  0.0  U                       1972SSc  (9654)  50
                                       K1<0.9
Method:ultrasonic absorption
--------------------------------------------------------------------------------
Er+++      sp  non-aq  0°C 100%  U                       1971PEi  (9655)  51
                                       B5=7.68
Medium:Me2CO
--------------------------------------------------------------------------------
Er+++      sp  NaClO4 20°C 4.10M U        K1=-0.27       1970ASa  (9656)  52
--------------------------------------------------------------------------------
Er+++      sp  KNO3     ?   var  U                       1970KSf  (9657)  53
                                       K(Er+3L+HL)=-0.76
                                       K(ErL3HL+2HL)=-0.87
--------------------------------------------------------------------------------
Er+++      dis NaClO4 25°C  1.0M U        K1=-0.33       1967KOb  (9658)  54
********************************************************************************
N3-                    HL    Azide            CAS 7782-79-8  (441)
Azide;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Er+++      sp  none   25°C  0.0  U        K1=0.08        1983MCb (10204)  55
--------------------------------------------------------------------------------
Er+++      sp  NaClO4 25°C  1.0M C        K1=0.59        1982GAb (10205)  56
Method: competition with Co(II).
********************************************************************************
OH-                    HL    Hydroxide          (57)
Hydroxide;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Er+++      gl  NaCl   25°C  1.0M C                       2003RSa (11281)  57
                                       *K1=-8.18
                                       *Kso(Er(OH)3)=18.06
*Kso by radiometric titration using 171Er.
--------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C  0.0  C  IH                   2000KBa (11282)  58
                                       *K1=-7.52
In 0.7 M NaClO4, *K1=-7.82. DH(*K1)=46 kJ mol-1.
--------------------------------------------------------------------------------
Er+++      gl  NaCl   25°C 0.10M U  I                    1999FBa (11283)  59
                                       *B(1,3)=-21.33
In 0.1 M Me4NCl, *B(1,3)=-22.11.
--------------------------------------------------------------------------------
Er+++      gl  NaNO3  25°C  2.0M C                       1990LSc (11284)  60
                                       *K1=-9.22
                                       *B(2,2)=-13.38
```

```
                                        *B(2,3)=-20.13
-------------------------------------------------------------------------------
Er+++      gl  NaClO4 22°C 1.00M C                    1983KDc (11285)  61
                                        *K1=-6.3
                                        *B2=-14.5
                                        *B3=-23.1,    *B4=-36.8
                                        *Kso(Er(OH)3)=18.0
-------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 3.00M U                    1973AKa (11286)  62
                                        *B2=-17.4
                                        *B(2,2)=-13.72
Medium: LiClO4
-------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 3.00M U                    1973AKb (11287)  63
                                        *B2=-17.4(-17.2?)
                                        *B(2,2)=-14.29
Medium: D2O containing LiClO4. *K2: ErOD+D2O=Er(OD)2+D;
*B(2,2): 2Er+2D2O=Er2(OD)2+2D
-------------------------------------------------------------------------------
Er+++      EMF alc/w  20°C  25%  U                    1973SPe (11288)  64
                                        *K1(ErA+H2O=ErAOH+H)=-6.96
Medium: ca.25 to 35% w/w MeOH or EtOH/H2O. H3A=NTA
-------------------------------------------------------------------------------
Er+++      dis NaClO4   ?  0.10M U                    1971GDb (11289)  65
                                        *K1=-5.5
Medium: LiClO4
-------------------------------------------------------------------------------
Er+++      sol oth/un 25°C       U                    1970IEb (11290)  66
                                        K(ErL3(s)+L=ErL4)=-5.5
                                        K(ErL3(s)+L2=ErL5)=-6.3
                                        K(ErL3(s)+3L=ErL6)=-7.3
-------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 0.30M U                    1966FKa (11291)  67
                                        *K1=-7.99
-------------------------------------------------------------------------------
Er+++      sol oth/un 25°C  var  U                    1966ISa (11292)  68
                                        K(ErL3(s)=ErL3)=-2.9
Medium: NaOH var.
-------------------------------------------------------------------------------
Er+++      sol none   25°C  0.0  M                    1966KSf (11293)  69
                                        Kso=-26.71
-------------------------------------------------------------------------------
Er+++      oth oth/un 20°C  dil  U                    1966OPa (11294)  70
                                        Kso=-23.9
-------------------------------------------------------------------------------
Er+++      sol none   25°C  0.0  U                    1960AKb (11295)  71
                                        Kso(Er(OH)3)=-26.57
-------------------------------------------------------------------------------
Er+++      gl  oth/un 25°C  var  U                    1951MFb (11296)  72
                                        Kso(Er(OH)3)=-23.39
```

```
--------------------------------------------------------------------------------
Er+++      gl  oth/un 25°C  var  U                        1944MKa (11297)  73
                                        Kso(Er(OH)3)=-22.9
********************************************************************************
PO4---                H3L    Phosphate        CAS 7664-38-2  (176)
Phosphate;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Er+++      sol none   25°C  0.0  M                        1997LBd (13163)  74
                                        Kso(ErPO4)=-25.13
Calculated from data for 0.10 M HClO4 solution.
--------------------------------------------------------------------------------
Er+++      sol oth/un 25°C  0.0  C  I                     1993FKb (13164)  75
                                        Kso(ErPO4)=-27.07
In synthetic seawater, Ks(ErPO4)=-24.47.
--------------------------------------------------------------------------------
Er+++      sol none   25°C  0.0  C                        1991FBa (13165)  76
                                        Kso(ErPO4)=-25.78
--------------------------------------------------------------------------------
Er+++      sol NaClO4 25°C  0.0  C T                      1985JBa (13166)  77
                                        Kso(ErPO4.xH2O)=ca.-24.2
Disolution of ErPO4.xH2O in 0.02-0.004  M HNO3. Calculated for I=0 M.
At 100 C, Kso=ca.-25.5.
********************************************************************************
P2O7----              H4L    Pyrophosphate    CAS 2466-09-3  (198)
Diphosphate; from (HO)2PO.O.PO(OH)2
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Er+++      kin none   25°C  0.0  U        B2=21.29        1967SSo (13582)  78
********************************************************************************
P2W17O61----------           Polytungstate      (2102)
alpha-Heterodiphospho-polytungstate (usually alpha1 isomer)
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Er+++      sp  NaClO4 25°C  1.0M C        K1=7.00         2003VCa (13713)  79
Method: laser-induced fluorescence spectroscopy for Eu+++ as competing ion
For P2W18O62, K1=3.30.
--------------------------------------------------------------------------------
Er+++      cal NaClO4 25°C  1.0M C   H                    2002VCa (13714)  80
DH(K1)=0.96 kJ mol-1, DS(K1)=137.2 J K-1 mol-1.
--------------------------------------------------------------------------------
Er+++      cal NaClO4 25°C  1.0M C   H    K1=3.15         2002VCa (13715)  81
DH(K1)=-1.28 kJ mol-1, DS(K1)=58.9 J K-1 mol-1.
By entropy titration: DH(K1)=-1.36 KJ mol-1, DS(K1)=60.85 J K-1 mol-1.
********************************************************************************
P3O10-----            H5L                      CAS 10380-08-2  (1001)
Tripolyphosphate; from (HO)2PO.O.PO(OH).O.PO(OH)2
```

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	U	T H	B2=9.5 K(Er+2HL)=7.2	1974KRa (13852)	82

K(Er+2HL)=7.4 and B2=9.7 (35 C), K(Er+2HL)=7.0 and B2=9.2 (45 C)
DH(Er+2HL)=-19 kJ mol-1; DH(B2)=-28

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	?	0.10M	U		B2=17.41 K(Er+HL)=5.00 K(Er+2HL)=9.05	1962RKa (13853)	83

****

ReO4- HL Perrhenate (2581)
Rhenate(VII), Perrhenate;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	oth/un	rt	1.00M	U		K1=-0.82	1970POa (14097)	84

Medium: HReO4

****

SCN- HL Thiocyanate CAS 463-56-9 (106)
Thiocyanate;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	dis	oth/un	25°C	1.0M	C		K1=0.45	1997HTb (14931)	85

Method: by solvent extraction from 1.0 M NaSCN into CHCl3, 0.1 M
1,1,1-trifluoro-4-(2-thienyl)-2,4-pentanedione.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	NaClO4	?	0.60M	U	T	K1=0.16	1964KSe (14932)	86

****

SO4-- H2L Sulfate CAS 7664-93-9 (15)
Sulfate;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sol	oth/un	25°C	0.66M	C		K1=1.84	2004SBb (16148)	87

Method: solubility of BaSO4 in 0.117 m ErCl3 solution.
Calculated for I=0, K1=3.51.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	cal	none	25°C	0.0	U	T H		1974FPc (16149)	88

DH(K1)=14.1 kJ mol-1, DS=115.5 J K-1 mol-1. In D2O: DH(K1)=14.7, DS=117.5

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	cal	none	25°C	0.0	U	H		1974POa (16150)	89

DH(K1)=20.3 kJ mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	con	oth/un	25°C	0.0	U		K1=3.58	1973FPb (16151)	90

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	cal	oth/un	25°C	0.0	U	H		1969FPa (16152)	91

DH(K1)=14.2 kJ mol-1

```
------------------------------------------------------------------------------
Er+++      cal oth/un 25°C  0.0  U   H    K1=3.41   B2=5.19   1969IEa (16153)  92
DH(K1)=15.1 kJ mol-1, DH(K2)=5.7; DS(K1)=115.8 J K-1 mol-1, DS(K2)=53.1
------------------------------------------------------------------------------
Er+++      ISE NaClO4 25°C  2.0M U   H    K1=1.23   B2=1.71   1967CCd (16154)  93
By calorimetry: DH(K1)=17.6 kJ mol-1, DS=82.3 J K-1 m-1; DH(K2)=6.3, DS=30.1
------------------------------------------------------------------------------
Er+++      con oth/un 25°C  0.0  U        K1=3.59        1954SJa (16155)  94
******************************************************************************
CHO3F3S                HL                     CAS 1493-13-6  (6755)
Trifluoromethanesulfonic acid; CF3SO3H
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      sp  non-aq 25°C 100%  U                        1993BCc (17461)  95
                                       K3=2.45
Medium: MeCN
******************************************************************************
C2H2O3                 HL    Glyoxylic acid   CAS 298-12-4  (1142)
Glyoxylic acid; OHC.COOH
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  NaClO4 20°C 0.10M U        K1=2.60   B2=4.60   1964PSd (18419)  96
                                       K3=1.6
******************************************************************************
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
------------------------------------------------------------------------------
Er+++      ix  R4N.X  25°C 0.05M C        K1=5.91   B2=10.32  2001SBf (18862)  97
                                       K(Er+HL)=2.09
Medium: 0.05 M NH4NO3. At I=0, K1=6.83, B2=11.51.
------------------------------------------------------------------------------
Er+++      gl  KCl    25°C  1.0M U    M                 1988KTa (18863)  98
                                       K(Er(edta)+L)=3.05
------------------------------------------------------------------------------
Er+++      gl  KNO3   35°C 0.10M U    M   K1=6.85       1986RMb (18864)  99
                                       B(ErL(cytidine))=10.22
------------------------------------------------------------------------------
Er+++      sp  NaNO3  20°C 2.50M U    M                 1981DFa (18865) 100
                                       K(Er(CO3)4+L)=1.37
------------------------------------------------------------------------------
Er+++      sol oth/un 30°C 0.10M U T      K1=3.78       1969KAe (18866) 101
                                       B3=8.43
K1(18C)=2.92, B2(18C)=5.70, B3(18C)=8.64
------------------------------------------------------------------------------
Er+++      sol NaClO4   ?  0.10M U        K1=4.82   B2=8.21   1962AKa (18867) 102
                                       B3=10.03
```

****

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
Er+++	sp	NaClO4	21°C	2.00M	U		K1=1.68 B3=3.46 B4=3.92	B2=2.85	1981BMc (19942)	103
Er+++	gl	alc/w	25°C	95%	U	H	K1=5.15 B3=11.88 B4=13.06	B2=9.11	1967GWa (19943)	104

Medium:95% MeOH,0.5 M NaClO4. By Calorimetry:DH(K1)=19.1 kJ mol-1,DS=162.6 J K-1 mol-1; DH(K2)=12.2,DS=116.2; DH(K3)=7.9,DS=79.2; DH(K4)=-16.7,DS=-25.1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	cal	NaClO4	25°C	2.0M	C	H			1964GRa (19944)	105

DH(K1)=13.71 kJ mol-1, DS(K1)=77.4 J K-1 mol-1; DH(B2)=23.05, DS(B2)=133; DH(B3)=21.62, DS(B3)=144.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	20°C	0.10M	U		K1=2.01	B2=3.60	1962KPa (19945)	106
Er+++	EMF	NaClO4	20°C	2.0M	U		K1=1.60 B3=3.65 B4=3.6	B2=2.83	1958SOa (19946)	107

Method: quinhydrone electrode. By spectrophotometry: K1=1.65,B2=2.88,B3=3.7

****

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
Er+++	gl	NaClO4	25°C	0.20M	U		K1=5.80	B2=11.02	1995PJb (20310)	108
Er+++	cal	NaClO4	25°C	2.0M	C	H			1964GRa (20311)	109

DH(K1)=9.958 kJ mol-1, DS(K1)=57.7 J K-1 mol-1; DH(B2)=22.8, DS(B2)=118.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	20°C	0.10M	U				1964PKa (20312)	110
							K(Er+HL)=1.94 K(ErHL+HL)=1.32			
Er+++	gl	NaClO4	25°C	2.0M	U				1962BCa (20313)	111
							K(Er+HL)=1.28 K(ErHL+HL)=0.9			

****

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

```
Er+++      gl  NaClO4 25°C  3.0M C                      2002TFa (20524) 112
                                    B(Er2H-2L6)=0.53
                                    B(Er4H-6L8)=-13.8
                                    B(Er4H-7L8)=-22.6
                                    B(Er4H-8L8)=-32.3
-------------------------------------------------------------------------------
Er+++      EMF NaClO4 25°C 1.00M U    M   K1=2.52   B2=4.92   1991WPb (20525) 113
                                    B(ErLA)=4.94
H2A=maleic acid
-------------------------------------------------------------------------------
Er+++      sp  NaClO4 21°C 2.00M U     K1=2.56   B2=4.62   1981BMc (20526) 114
                                    B3=5.87
                                    B4=6.63
-------------------------------------------------------------------------------
Er+++      gl  KNO3   32°C 0.10M U                      1980PPf (20527) 115
                                    K(Er+HL=ErL+H)=-0.63
                                    *K(ErL)=-5.70
                                    K(Er+2HL=ErL2+2H)=-1.90
                                    *K(ErL2)=-5.61
-------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 0.50M C      T K1=2.61   B2=4.69   1977CMa (20528) 116
                                    B3=6.07
-------------------------------------------------------------------------------
Er+++      cal NaClO4 25°C  2.0M C   H                 1964GRa (20529) 117
DH(K1)=-0.80 kJ mol-1, DS(K1)=47.3 J K-1 mol-1; DH(B2)=-2.5, DS(B2)=79.1;
DH(B3)=-5.36, DS(B3)=96.7; DH(B4)=-5.98, DS(B4)=105.
-------------------------------------------------------------------------------
Er+++      gl  NaClO4 20°C 0.10M U     K1=3.004  B2=5.19   1964PKb (20530) 118
                                    B3=6.85
-------------------------------------------------------------------------------
Er+++      EMF NaClO4 20°C  2.0M U     K1=2.60   B2=4.58   1959SOb (20531) 119
                                    B3=6.0
                                    B4=6.5
                                    B5=6.5
Method: quinhydrone electrode
*******************************************************************************
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
-------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 0.20M U     K1=4.96   B2= 8.85  1995PJb (21533) 120
-------------------------------------------------------------------------------
Er+++      gl  KNO3   25°C 0.20M U    M   K1=6.20        1990LSb (21534) 121
                                    K(Er(phen)+L)=6.02
-------------------------------------------------------------------------------
Er+++      gl  KNO3   35°C 0.10M U                      1987RRc (21535) 122
                                    K(Er+HL)=3.93
-------------------------------------------------------------------------------
Er+++      gl  KNO3   35°C 0.10M U    M                 1986RMb (21536) 123
```

K(Er+HL)=3.93
K(Er+HL+cytidine)=8.64

Er+++ cal oth/un 25°C 0.03M U H K1=4.45 1981PBa (21537) 124

Er+++ EMF KCl 25°C 1.0M U M 1977GMa (21538) 125
K(ErA+L)=4.32
K(ErA+HL)=3.13
K(ErA+H2L)=3.20
Method: Pt/H2 electrode. H3A is N-hydroxyethyl-1,2-diaminoethane-N,N',N'-triethanoic acid.
****
C2H6OS L DMSO CAS 67-68-5 (329)
Dimethylsulfoxide; (CH3)2.SO

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ sp non-aq 25°C 100% U 1992MBb (22096) 126
K8=1.0
K9=0.5
Medium: MeCN. Method: FT-IR and Raman spectroscopy
****
C2H6O2 L Ethyleneglycol CAS 107-21-1 (924)
1,2-Dihydroxyethane (Ethane-1,2-diol); HO.CH2.CH2.OH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl NaClO4 22°C 0.10M U 1972MCd (22144) 127
K(ErH-1L+H)=6.95
****
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
---
Er+++ ISE non-aq 25°C 100% C H K1=2.71 B2=5.16 1992CBa (23149) 128
B3=6.76
Medium: DMSO, 0.10 M Et4NClO4. By calorimetry, DH(K1)=-21.1, DH(B2)=-40.8, DH(B3)=-81.4 kJ mol-1.
****
C3H4O2 HL Acrylic acid CAS 79-10-7 (2044)
Propenoic acid; CH2:CH.COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl oth/un 25°C ? U M K1=1.96 1998PAa (23985) 129
K(ErL+acac)=5.89
K(Er(acac)L+acac)=4.42
Additional method: nmr. Medium not stated.
****

C3H4O3 HL Pyruvic acid CAS 127-17-3 (1152)
2-Oxopropanoic acid; CH3.CO.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	nmr	NaClO4	25°C	2.00M	U	H	K1=1.72	1980CCa (24047)	130

DH=-4.68 kJ mol-1. Alternative method: Calorimetry.

****

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
Er+++	gl	NaClO4	25°C	1.00M	U		K1=3.814 B2=6.369 B(ErHL)=6.54	1987MOa (24427)	131
Er+++	gl	NaClO4	25°C	0.10M	U		K1=4.89 B2=8.01	1972DCc (24428)	132
Er+++	gl	NaClO4	25°C	1.00M	U		K1=3.85 B2=6.39 B3=7.61 B(ErHL)=6.35 B(ErHL2)=9.93	1971DGa (24429)	133
Er+++	ix	NaClO4	25°C	0.15M	U		K(Er+HL)=2.1 K(ErHL+HL)=0.90	1968KKc (24430)	134
Er+++	gl	KNO3	25°C	0.10M	U		K1=4.42 B2=7.04	1968PFa (24431)	135

****

C3H4O6 H2L CAS 560-27-0 (4233)
Dihydroxypropanedioic acid; HOOC.C(OH)2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KCl	25°C	0.20M	U		K1=3.67	1973LPb (24624)	136

****

C3H5NO2 HL (4234)
Isonitrosoacetone; CH3.CO.CH:N.OH, anti-Pyruvic aldehyde oxime

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	diox/w	20°C	50%	U		K1=5.99	1971MAf (24641)	137

Medium: 50% dioxan, 0.1 M NaClO4

****

C3H6N2O2 L Methylglyoxime CAS 2140-03-6 (2981)
Methylglyoxime; CH3.C(:N.OH).CH:N.OH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	diox/w	20°C	50%	U		K1=7.19 B2=13.27	1971MAf (24803)	138

Medium: 50% dioxan, 0.1 M NaClO4

****

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
Er+++	sp	NaClO4	21°C	2.00M	U		K1=1.78 B3=3.58 B4=3.94	B2=2.93	1981BMc (24998)	139
Er+++	gl	NaClO4	25°C	2.0M	U		K1=1.60	B2=2.72	1965CGa (24999)	140
Er+++	gl	NaClO4	20°C	0.10M	U		K1=1.94	B2=3.48	1964PKa (25000)	141

****

C3H6O2S H2L Thiolactic acid CAS 79-42-5 (366)

2-Mercaptopropanoic acid; CH3.CH(SH).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.20M	U		K1=5.78	B2=11.42	1995PJb (25136)	142
Er+++	gl	NaClO4	25°C	2.00M	U		K(Er+HL)=1.53		1968CMa (25137)	143
Er+++	gl	NaClO4	31°C	2.0M	U		K(Er+HL)=1.38 K(ErHL+HL)=1.0		1963BCb (25138)	144

****

C3H6O2S H2L CAS 107-96-0 (437)

3-Mercaptopropanoic acid; HS.CH2.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	2.00M	U		K(Er+HL)=1.41		1968CMa (25204)	145
Er+++	gl	NaClO4	31°C	2.0M	U		K(Er+HL)=1.70 K(ErHL+HL)=1.4		1963BCb (25205)	146

****

C3H6O3 HL CAS 81598-26-7 (2521)

3-Hydroxypropanoic acid; HO.CH2.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	2.00M	U		K1=1.32		1969JCc (25263)	147

****

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
Er+++	gl	KNO3	30°C	0.10M	U			1983MPc (25431)		148
							K(Er+HL=ErL+H)=0.41			
							*K(ErL)=-4.60			
							K(Er+2HL=ErL2+2H)=-0.66			
							*K(ErL2)=-3.87			
Er+++	gl	NaClO4	25°C	0.10M	U		K1=3.21	B2=5.57	1966GGb (25432)	149
							B3=7.2			
Er+++	gl	NaClO4	25°C	0.20M	U		K1=2.86	B2=5.19	1964DVa (25433)	150
							K3=1.33			
							K4=0.66			
Er+++	gl	NaClO4	20°C	0.10M	U		K1=3.164	B2=5.62	1964PKb (25434)	151
							B3=7.20			
Er+++	gl	NaClO4	25°C	2.0M	U		K1=2.77	B2=5.11	1961CCa (25435)	152
							K3=1.59			

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
Er+++	gl	NaClO4	20°C	0.10M	U		K1=2.08	B2=3.23	1964PKa (25596)	153

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
Er+++	gl	NaClO4	25°C	0.20M	U		K1=5.07	B2= 8.87	1995PJb (26162)	154
Er+++	gl	KNO3	25°C	0.20M	U	M	K1=6.67		1990LSb (26163)	155
							K(Er(phen)+L)=6.46			
Er+++	gl	KNO3	25°C	0.10M	U		K1=4.7		1967EMb (26164)	156

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
Er+++	gl	NaClO4	20°C	0.0	U	T H	K1=8.000	B2=15.79	1980SDc (26771)	157

Extrapolated from data for I=0.10-1.0 M. Data for 35 and 45 C.
DH(K1)=-13.3 kJ mol-1, DS=108 J K-1 mol-1; DH(K2)=-24.3, DS(K2)=66.19.

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
Er+++	gl	oth/un	25°C	0.10M	U		K1=3.89		1965PGe (27126)	158

****

C3H8O2 L Propyleneglycol CAS 57-55-6 (2025)
Propan-1,2-diol; CH3.CH(OH).CH2(OH)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	22°C	0.10M	U				1972MCd (27674)	159
							K(ErH-1L+H)=6.85			

****

C3H8O3 L Glycerol CAS 56-81-5 (2707)
Propane-1,2,3-triol; HO.CH2.CH(OH).CH2.OH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	22°C	0.10M	U				1972MCd (27729)	160
							K(ErH-1L+H)=6.75			
Er+++	gl	NaCl	25°C	0.10M	U				1970PKe (27730)	161
							K(ErH-1L+H)=6.73			

****

C3H12NO9P3 H6L NTPA CAS 6419-19-8 (2920)
Nitrilotris(methylenephosphonic acid); N(CH2PO3H2)3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	U		K1=12.48	B2=22.80	2002KAa (28558)	162
							K(Er+HL)=6.13			
							K(Er+2HL)=8.49			
Er+++	gl	KNO3	25°C	0.10M	C				1991SKb (28559)	163
							K(ErL+H)=6.98			
							K(ErHL+H)=5.15			

****

C4H2O4 H2L Squaric acid CAS 2892-51-5 (439)
3,4-Dihydroxy-3-cyclobutene-1,2-dione;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	cal	NaClO4	25°C	0.10M	U	H	K1=2.81	B2=4.25	1976OCa (28644)	164

DH(K1)=10.1 kJ mol-1, DS=88 J K-1 mol-1; DH(B2)=19.1, DS=146

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C	H	K1=2.815	B2= 4.32	1976OCb (28645)	165

By calorimetry: DH(K1)=10.1 kJ mol-1, DS(K1)=87.9 J K-1 mol-1;
DH(B2)=19.1, DS(B2)=146.

****

C4H4N2O2S H2L Thiobarbituric CAS 504-17-6 (4279)
4,6-Dihydroxy-2-mercaptopyrimidine, 2-thiobarbituric acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	oth/un	25°C	0.10M	U		K1=2.620		1987TSb (28886)	166

****

C4H4N2O3 H2L Barbituric acid CAS 67-52-7 (2818)
2,4,6-Trihydroxypyrimidine; C4HN2(OH)3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	oth/un	25°C	0.10M	U	T H	K1=4.15		1987TSb (28910)	167

30 C:K=3.76; 35 C: 3.27. DH=-147 kJ mol-1, DS=-414 J K-1 mol-1

****

C4H4O4 H2L Maleic acid CAS 110-16-7 (111)
cis-Butenedioic acid; HOOC.CH:CH.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	oth/un	25°C	?	U	M	K1=3.51		1998PAa (29069)	168
							K(ErL+acac)=5.11			
							K(Er(acac)L+acac)=4.46			

Additional method: nmr. Medium not stated.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	EMF	NaClO4	25°C	1.00M	U	M	K1=2.81	B2=4.31	1991WPb (29070)	169
							B(ErLA)=4.94			

HA=glycolic acid

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	U		K1=3.64		1973CDc (29071)	170
Er+++	gl	NaClO4	25°C	0.10M	U		K1=3.65	B2=5.71	1970RFa (29072)	171

****

C4H4O4 H2L Fumaric acid CAS 110-17-8 (289)
trans-Butenedioic acid; HOOC.CH:CH.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C		K1=2.46		1986LCa (29194)	172
							B(ErHL)=5.95			
							K(Er+HL)=1.87			
Er+++	gl	NaClO4	25°C	0.10M	U		K1=2.80		1973CDc (29195)	173

****

C4H4O5 H2L Oxobutanedioic CAS 328-42-7 (1733)
2-Oxosuccinic acid, Oxalacetic acid; HOOC.CH2.CO.COOH

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

Er+++ gl NaClO4 25°C 0.50M M K1=4.029 B2=7.66 1991MOa (29265) 174
****
C4H6O2 HL Methylacrylic (6992)
2-Methylpropenoic acid; CH2:C(CH3)COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KCl 25°C 0.10M U K1=2.29 1995PAa (29696) 175
****
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
---
Er+++ gl NaClO4 25°C 0.10M M H K1=3.32 1986CDb (29964) 176
DH=18.2 kJ mol-1, DS=123 J K-1 mol-1

Er+++ sol oth/un 25°C 0.50M U K1=4.54 1970MKe (29965) 177

Er+++ ix NaClO4 25°C 0.15M U 1968KKc (29966) 178
K(Er+HL)=1.71
K(ErHL+HL)=1.3
****
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
---
Er+++ gl KCl 25°C 0.20M U K1=4.39 B2=6.92 1975PLa (30121) 179
****
C4H6O4S H2L Thiodiacetic CAS 123-93-3 (140)
2,2'-Thiodiglycolic acid, Thiodiethanoic acid; HOOC.CH2.S.CH2.COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl NaClO4 25°C 1.00M U K1=2.36 B2=3.85 1973DGa (30214) 180
B(ErHL)=5.14
B(ErHL2)=7.21
****
C4H6O4S H3L Thiomalic acid CAS 70-49-5 (109)
2-Mercaptosuccinic acid, 2-Sulfanyl-1,4-butanedioic acid; HOOC.CH(SH).CH2.COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl NaClO4 25°C 0.20M U K1=6.19 B2=11.97 1995PJb (30328) 181
****
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

```
------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 1.00M U        K1=4.334  B2=5.356  1987MOa (30616) 182
                                         B(ErHL)=5.48
------------------------------------------------------------------------------
Er+++      gl  KNO3   30°C 0.10M U    M                 1984AIa (30617) 183
                                         K(Er(EDTA)+L)=2.140
------------------------------------------------------------------------------
Er+++      gl  KNO3   20°C 0.10M U                      1980SDa (30618) 184
                                         B(ErHL)=5.39
------------------------------------------------------------------------------
Er+++      gl  KNO3   20°C 0.10M U        K1=4.66   B2=7.76   1980SDb (30619) 185
                                         K(Er+HL)=0.97
------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 0.10M U        K1=4.96   B2=8.35   1970RFa (30620) 186
------------------------------------------------------------------------------
Er+++      EMF NaClO4 25°C 2.00M U        K1=3.95   B2=6.64   1969JPa (30621) 187
******************************************************************************
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
------------------------------------------------------------------------------
Er+++      gl  KCl    25°C  1.0M U    M                 1988KTa (30865) 188
                                         K(Er(edta)+L)=1.10
------------------------------------------------------------------------------
Er+++      EMF NaClO4 20°C 1.00M U        K1=5.47   B2=10.16  1972GOa (30866) 189
                                         B3=13.41
------------------------------------------------------------------------------
Er+++      cal NaClO4 25°C  1.0M C   H                 1963GRd (30867) 190
DH(K1)=6.945 kJ mol-1, DS(K1)=126 J K-1 mol-1; DH(B2)=2.93,
DS(B2)=202; DH(B3)=-17.58, DS(B3)=193.
------------------------------------------------------------------------------
Er+++      EMF NaClO4 20°C 1.00M U        K1=5.34   B2=10.02  1963GTa (30868) 191
                                         B3=13.23
Method: quinhydrone electrode
******************************************************************************
C4H6O6               H2L    DL-Tartaric acd  CAS 133-37-9  (94)
DL-Tartaric acid,DL-2,3-Dihydroxybutanedioic acid; HOOC.CH(OH).CH(OH).COOH
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 1.00M U        K1=3.000  B2=5.839  1987MOa (31018) 192
                                         B(ErHL)=5.69
******************************************************************************
C4H6O6               H2L    L-Tartaric acid  CAS 87-69-4  (92)
L-Tartaric acid, L-2,3-Dihydroxybutanedioic acid; HOOC.CH(OH).CH(OH).COOH
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  alc/w  25°C  50%  U  I     K1=5.46        1972SSj (31228) 193
```

Medium: 0.5, 0-50% EtOH. At I=0, 50% EtOH: K1=7.14

Er+++ EMF NaClO4 25°C 2.00M U K1=3.62 B2=5.79 1969JPa (31229) 194

Er+++ gl KCl 24°C 0.20M U K1=3.33 1966DDa (31230) 195

****

C4H7NO3 HL CAS 543-24-8 (3586)

N-Acetylglycine; CH3.CO.NH.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	EMF	NaClO4	25°C	0.10M	U		K1=1.51	1971RCa (31500)	196

****

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
Er+++	gl	NaClO4	25°C	0.20M	U		K1=5.90 B2=10.74	1995PJb (31847)	197
Er+++	gl	NaClO4	30°C	0.10M	U		K1=5.71 B2=10.54	1984YLa (31848)	198
Er+++	gl	KCl	25°C	0.10M	U		K1=6.08 B2=10.93	1968DRb (31849)	199

****

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
Er+++	gl	KCl	25°C	1.0M	U	M		1988KTa (32226)	200
							K(Er(edta)+L)=3.73		
Er+++	EMF	KCl	25°C	1.0M	U	M		1977GMa (32227)	201
							K(ErA+L)=5.35		
							K(ErA+H2L)=0.91		
							K(ErA+H3L)=2.29		

Method: Pt/H2 electrode. H3A is N-hydroxyethyl-1,2-diaminoethane-N,N',N'-triethanoic acid.

Er+++	sp	none	25°C	0.0	U	M		1974PLa (32228)	202
							K(ErL+H2O2)=3.72		
Er+++	EMF	KNO3	20°C	0.10M	U	HM		1971GKb (32229)	203
							K(ErA+L)=3.25		

DH(ErA+L)=-29.25 kJ mol-1, DS=-37.7 J K-1 mol-1. DH(ErAL)=-36.40, DS=299

H4A=EDTA

Er+++	sp	oth/un	20°C	1.00M	U	M		1971TKf (32230)	204
							K(ErL+A)=3.4		

H4A=EDTA

```
------------------------------------------------------------------------------
Er+++      sp  oth/un 20°C 1.00M U    M                  1971TSh (32231) 205
                                        K(ErA+L)=3.4
H4A=EDTA
------------------------------------------------------------------------------
Er+++      gl  KNO3   25°C 0.10M U    M   K1=7.09   B2=12.68  1962THa (32232) 206
Ternary complexes with N-(2-hydroxyethyl)diaminoethane-triethanoic acid
******************************************************************************
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
------------------------------------------------------------------------------
Er+++      gl  diox/w 20°C  50%  U        K1=8.51   B2=16.03  1971MAf (32537) 207
Medium: 50% v/v dioxan, 0.1 M NaClO4
******************************************************************************
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
------------------------------------------------------------------------------
Er+++      gl  NaClO4 30°C 0.10M U        K1=4.10   B2=7.07   1984YLa (32693) 208
******************************************************************************
C4H8N2O4              H2L    HDA              CAS 19247-05-3  (1025)
Hydrazine-N,N'-diethanoic acid; HOOC.CH2.NH.NH.CH2.COOH
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  KCl    60°C 0.10M U        K1=6.46   B2=11.07  1978NBa (33083) 209
                                        B3=13.08
******************************************************************************
C4H8N2O4              H2L                    CAS 39156-77-9  (3008)
Hydrazine-N,N-diethanoic acid; H2N.N(CH2.COOH)2
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  KNO3   30°C 0.10M U    M                  1984AIa (33104) 210
                                        K(Er(EDTA)+L)=2.218
******************************************************************************
C4H8O2                 HL    Isobutyric acid  CAS 79-31-2  (573)
2-Methylpropanoic acid; CH3.CH(CH3).COOH
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 2.00M U   H    K1=1.61   B2=2.72   1965CGa (33225) 211
By calorimetry: DH(K1)=23.0 kJ mol-1, DS=108 J K-1 mol-1; DH(K2)=14.2, DS=70
------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 0.50M U        K1=1.69   B2=2.59   1964SPa (33226) 212
******************************************************************************
C4H8O2S                HL                     CAS 627-04-3  (3007)
```

S-Ethylthioethanoic acid; CH3.CH2.S.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	31°C	2.0M	U		K1=1.42	B2=2.42	1963BCb (33404)	213

****

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
Er+++	gl	NaClO4	25°C	0.20M	U		K1=3.01	B2=5.70	1964DVa (33463)	214
							K3=1.88			
							K4=1.45			
Er+++	gl	NaClO4	20°C	0.10M	U		K1=3.350	B2=6.04	1964PKb (33464)	215
							B3=8.13			
Er+++	gl	NaClO4	25°C	0.50M	U		K1=3.03	B2=5.54	1964SPa (33465)	216
							B3=7.56			
Er+++	gl	NaClO4	25°C	2.0M	U		K1=3.07	B2=5.73	1961CCa (33466)	217
							K3=2.07			

****

C4H8O4 HL CAS 21620-60-0 (2326)

2,3-Dihydroxy-2-methylpropanoic acid; HO.CH2.C(OH)(CH3).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	C		K1=3.17	B2=5.68	1975PFb (33677)	218
							K3=1.81			

****

C4H8O5 HL CAS 56309-80-9 (2365)

2,3-Dihydroxy-2-hydroxymethylpropanoic acid; HO.CH2.C(CH2.OH)(OH).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	EMF	KNO3	25°C	0.10M	U		K1=3.05	B2=5.53	1976PKb (33695)	219
							K3=1.85			
Er+++	gl	NaClO4	25°C	0.50M	U		K1=2.79	B2=4.83	1964SPa (33696)	220
							B3=6.57			

****

C4H11N L Butylamine CAS 109-73-9 (159)

1-Aminobutane; CH3.CH2.CH2.CH2.NH2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	cal	non-aq	25°C	100%	U	H	K1=4.26	B2=7.61	1997CDa (34764)	221
							B3=9.70			

B4=11.29
Medium: MeCN. DH(K1)=-34.9 kJ mol-1, DS=36, DH(B2)=-68.2, DS=83;
DH(B3)=-104, DS=163, DH(B4)=-121, DS=190
****
C4H11O4P HL (4276)
Diethylphosphoric acid; (C2H5O)2.PO.OH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ kin oth/un 25°C U K1=2.08 1971MGb (35256) 222
****
C4H12N2O L CAS 2752-17-2 (312)
Bis-(2-aminoethyl)ether; H2N.CH2.CH2.O.CH2.CH2.NH2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ EMF non-aq 25°C 100% C H K1=2.6 B2= 4.40 2002CDb (35505) 223
Method: comp. reactn. using Ag electrode. Medium: DMSO, 0.10 M Et4NClO4.
Calorimetr: DH(K1)=-12 kJ mol-1, DS=10 J K-1 mol-1; DH(B2)=-26, DS=-3.
****
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
---
Er+++ EMF NaClO4 25°C 100% C H K1=6.39 B2=10.43 2000CDa (35774) 224
Medium: DMF, 0.10 M Et4N[CF3SO3]. Method: Ag/Ag+ electrode.
By calorimetry: DH(K1)=-46.3, DH(B2)=-94.5 kJ mol-1.

Er+++ ISE non-aq 25°C 100% C H K1=3.82 B2=6.99 1993CCb (35775) 225
Medium: DMSO, 0.1 M Et4NClO4. Method: Ag+ ISE. By calorimetry, DH(K1)=-33.2
kJ mol-1, DS=-38; DH(B2)=-74.1, DS-115.
****
C4H14N2O6P2 H2L EDDPO CAS 1733-49-9 (2435)
1,2-Diaminoethane-N,N'-bis(methylenephosphonic) acid; (H2O3P.CH2.NH.CH2)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KCl 25°C 0.10M U 1965DKb (35876) 226
K(Er+HL) > 8.79
****
C5H4N2O2 HL CAS 98-97-5 (1879)
Pyrazine-2-carboxylic acid; cyclo(-CH:CH.N:C(COOH).CH:N-)

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ cal NaClO4 25°C 1.0M C H 1990YKb (36047) 227
DH(K1)=0.28 kJ mol-1, DS(K1)=55.3 J K-1 mol-1.

```
Er+++      EMF NaClO4 25°C  1.0M C        K1=2.84   B2= 4.95  1983KKb (36048) 228
                                         B3=6.66
Method: Pt/quinhydrone electrode.
**************************************************************************
C5H4O2S                HL    2-Thenoic acid   CAS 527-72-0  (2312)
Thiophene-2-carboxylic acid; C4H3S.COOH
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 0.10M U        K1=1.74   B2=2.79   1969RFa (36256) 229
**************************************************************************
C5H4O3                 HL    2-Furoic acid    CAS 88-14-2  (2492)
Furan-2-carboxylic acid; C4H3O.COOH
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 0.10M U        K1=1.74   B2=2.89   1969RFa (36294) 230
**************************************************************************
C5H4O3                 HL                     CAS 488-93-7  (1166)
Furan-3-carboxylic acid; C4H3O.COOH
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Er+++      cal NaClO4 25°C 2.00M U   H    K1=1.45        1976YCa (36302) 231
DH=8.66 kJ mol-1 and DS=57.74 J mol-1 K-1.
**************************************************************************
C5H5NO2                HL                     CAS 16867-04-2  (2316)
2,3-Dihydroxypyridine, 3-Hydroxypyridin-2(1H)-one; C5H3N(OH)2
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Er+++      gl  diox/w 25°C  50%  U        K1=8.62        1970GDa (36783) 232
Medium: 50% dioxan, 0.1 M NaClO4
**************************************************************************
C5H5O3F3               HL                       (7056)
2-Oxa-6-trifluorohexa-3,5-dione; CH3.O.CO.CH2.CO.CF3
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Er+++      gl  diox/w 25°C  50%  M  I     K1=6.03   B2=11.13  1994SSa (37063) 233
                                         K3=3.86
Medium: 50% dioxan, I=0 corr. At 35 C: K1=5.93, K2=5.09, K3=3.77
**************************************************************************
C5H6O4               H2L    Itaconic acid    CAS 97-65-4  (398)
Methylenesuccinic acid; HOOC.CH2.C(:CH2).COOH
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Er+++      gl  KCl    25°C 0.20M U        K1=3.18        1989MFa (37419) 234
                                         K(Er+HL)=1.77
```

```
------------------------------------------------------------------------------
Er+++      oth NaClO4 25°C  1.0M U        K1=2.27        1972STd (37420) 235
                                         B(ErHL)=6.24
                                         B(ErH2L2)=12.23
                                         B(ErHL2)=8.40
******************************************************************************
C5H7NO3                HL                        (4313)
Isonitrosoacetylacetone; HO.N:CH.CO.CH2.CO.CH3
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  diox/w 20°C  50%  U        K1=5.26   B2=8.98   1971MAf (37524) 236
Medium: 50% v/v dioxan, 0.1 M NaClO4
******************************************************************************
C5H8N2O3              H2L                        (4317)
Methylacetylglyoxime; CH3.C(:N.OH).C(:N.OH).CO.CH3
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  diox/w 20°C  50%  U        K1=6.19   B2=11.42  1971MAf (37701) 237
******************************************************************************
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
------------------------------------------------------------------------------
Er+++      sp  alc/w  18°C  60%  U        K1=6.17   B2=11.37  1998ZBa (37942) 238
                                         K3=3.53
Medium: 60% EtOH/H2O, 0.1 M NaClO4
------------------------------------------------------------------------------
Er+++      gl  KCl    25°C 0.10M U        K1=5.91   B2=10.39  1995PAa (37943) 239
                                         K3=3.21
------------------------------------------------------------------------------
Er+++      gl  NaClO4 20°C 0.10M U    M                  1973TZa (37944) 240
                                         K(Er(EDTA)+L)=3.65
------------------------------------------------------------------------------
Er+++      gl  R4N.X  25°C 0.10M U    M                  1972FGa (37945) 241
                                         K(Er(EDTA)+L)=3.07
Medium: NH4Cl.  By spectroscopy, K=3.12
------------------------------------------------------------------------------
Er+++      gl  alc/w    ?   50%  U  I     K1=7.25        1971KOa (37946) 242
Medium: 5-80% MeOH, 0.005 ErCl3, 0.005 HL. k1(5%)=6.21, k1(80%)=8.41
------------------------------------------------------------------------------
Er+++      EMF alc/w    ?   40%  U  I     K1=6.91        1968RKa (37947) 243
Medium: 5-60% MeOH, 0.02 M. K1(5%)=6.23, K1(20%)=6.49, K1(60%)=7.37
------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C  2.0M U        K1=5.70   B2=10.08  1964YCa (37948) 244
------------------------------------------------------------------------------
Er+++      gl  oth/un 30°C 0.10M U        K1=5.99   B2=10.67  1960GFa (37949) 245
                                         K3=3.38
```

****

C5H8O4 H2L CAS 601-75-2 (479)
Ethylpropanedioic acid; HOOC.CH(C2H5).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KCl	25°C	0.20M	U		K1=4.41	1989ZPa (38240)	246

In 70.4% v/v EtOH/H2O: K1 = 6.31

****

C5H8O4 H2L CAS 498-21-5 (2234)
Methylsuccinic acid; HOOC.CH2.CH(CH3).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	U		K1=3.08 B2=5.15	1970RFa (38259)	247

****

C5H8O4 H2L Glutaric acid CAS 110-94-1 (420)
Pentanedioic acid; HOOC.CH2.CH2.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	M	H	K1=3.09	1986CDb (38316)	248

DH=17.8 kJ mol-1, DS=119 J K-1 mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sol	oth/un	25°C	0.50M	U		K1=3.40	1970MKe (38317)	249

****

C5H8O7 H2L CAS 40120-71-6 (3022)
2,3,4-Trihydroxypentanedioic acid, Trihydroxyglutaric acid; HOOC.(CH(OH))3.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KCl	24°C	0.20M	U		K1=3.85	1966DDa (38419)	250

****

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
Er+++	gl	NaClO4	25°C	0.10M	U		B2=5.90	1981ZLa (38609)	251

****

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
Er+++	gl	NaCl	37°C	0.15M	U		K1=3.80	1997GMa (38726)	252
Er+++	gl	NaClO4	25°C	0.10M	U		B2=5.47	1981ZLa (38727)	253

****

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
Er+++	gl	KCl	25°C	0.10M	U		K1=7.27 B2=13.28 B3=15.68 B(Er+2OH+L)=18.61	1980MGc (39248)	254

C5H10O3 HL CAS 3739-30-8 (3612)
2-Hydroxy-2-methylbutanoic acid, Methylethylglycolic acid; CH3.CH2.C(OH)(CH3)COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	U		K1=3.32 B2=6.05 K3=1.98	1969PCa (40252)	255

C5H10O3 HL CAS 617-31-2 (474)
2-Hydroxypentanoic acid; CH3.CH2.CH2.CH(OH).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	1.0M	U		K1=2.68	1968GCa (40277)	256

C5H10O4 HL CAS 4767-03-7 (4297)
2,2-Bis(hydroxymethyl)propanoic acid; CH3.C(CH2OH)2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	U		K1=2.28 B2=3.88	1970RDa (40295)	257

C5H10O4 HL CAS 19860-56-1 (2327)
2,3-Dihydroxy-2-methylbutanoic acid; CH3.CH(OH).C(OH)(CH3).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	C		K1=3.11 B2=5.49 K3=1.59	1975PFb (40310)	258

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
Er+++	gl	KNO3	25°C	0.20M	U	M	K1=6.03 K(Er(phen)+L)=5.85	1990LSb (40699)	259
Er+++	cal	oth/un	25°C	0.03M	U	H	K1=4.20	1981PBa (40700)	260
Er+++	gl	KCl	25°C	0.10M	U	T	K1=4.19	1974BFa (40701)	261

C6H5NO2 HL Picolinic acid CAS 98-98-6 (391)
2-Pyridine-carboxylic acid; C5H4N.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values			Reference	ExptNo
Er+++	gl	KNO3	25°C	0.20M	U	M	K1=5.02			1987LSc (42521)	262
K(Er(nta)+L)=4.50, K(Er(edta)+L)=4.40.											
Er+++	gl	NaClO4	25°C	0.50M	U		K1=3.96	B2=7.33	B3=10.04	1977GGb (42522)	263
Er+++	gl	KNO3	25°C	0.10M	U		K1=4.26	B2=7.94	K3=2.84 K4=2.08	1968PIa (42523)	264
Er+++	gl	KNO3	25°C	0.10M	U		K1=4.28	B2=7.86	B3=10.9	1964THb (42524)	265

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C6H5NO2 HL Nicotinic acid CAS 59-67-6 (419)
3-Pyridine-carboxylic acid; C5H4N.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.20M	U		K1=2.21	1973FDa (42669)	266

****

C6H5NO3 H2L CAS 874-24-8 (4356)
3-Hydroxypyridine-2-carboxylic acid; C5H3N.(OH)(COOH)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	30°C	0.10M	U		K(Er+HL)=3.88 K(ErHL+HL)=3.50	1969DNc (42748)	267

****

C6H5NO3 HL 4-Nitrophenol CAS 100-02-7 (454)
4-Nitrohydroxybenzene; HO.C6H4.NO2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	R4N.X	25°C	0.10M	C		K1=1.35	1990CBe (42800)	268

****

C6H5NO4 H2L CAS 3163-07-3 (2711)
2,4-Dihydroxy-1-nitrobenzene; O2N.C6H3(OH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	KCl	25°C	0.10M	M	I	K1=6.29	1989PEa (42951)	269

****

C6H5O4Br L CAS 40838-32-2 (1084)
6-Bromo-5-hydroxy-2-(hydroxymethyl)-4H-pyran-4-one;

```
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      sp  KCl    25°C 0.10M U        K1=5.51        1987PLa (43107) 270
******************************************************************************
C6H5O4Cl               HL    Chlorokojic aci    (3086)
3-Chloro-5-hydroxy-2-hydroxymethyl-4-pyrone;
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  oth/un 30°C 0.10M U        K1=6.19   B2=11.63  1972DSd (43130) 271
******************************************************************************
C6H5O4I                 L                          (1085)
6-Iodo-5-hydroxy-2-hydroxymethyl-4H-pyran-4-one;
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      sp  KCl    25°C 0.10M U        K1=5.61        1987PLa (43149) 272
******************************************************************************
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
------------------------------------------------------------------------------
Er+++      gl  NaClO4 35°C 0.20M M        K1=9.87        1982LTa (43748) 273
------------------------------------------------------------------------------
Er+++      EMF NaCl   25°C 0.10M U        K1=11.43       1969PKe (43749) 274
******************************************************************************
C6H6O3                 HL    Maltol           CAS 118-71-8  (2442)
3-Hydroxy-2-methyl-4H-pyran-4-one;
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  NaClO4 30°C 0.10M U        K1=6.98   B2=12.66  1970DSc (44081) 275
                                         K3=4.21
******************************************************************************
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
------------------------------------------------------------------------------
Er+++      sp  KCl    25°C 0.10M C  I     K1=6.244       1987PEa (44205) 276
In 0.087 M KCl, K1=6.288.
------------------------------------------------------------------------------
Er+++      gl  oth/un 30°C 0.10M U        K1=6.31   B2=11.77  1972DSd (44206) 277
                                         K3=4.40
------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C  2.0M U        K1=5.72   B2=11.32  1964YCa (44207) 278
******************************************************************************
C6H6O6                H3L    cis-Aconitic     CAS 585-84-2  (3064)
```

cis-1,2,3-Propenetricarboxylic acid, cis-Aconitic acid; HOOC.CH:C(COOH)CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaCl	20°C	0.10M	U		K1=4.81	1986SKb (44296)	279
							K(Er+HL)=3.47		

****

C6H6O6S H4L CAS 29714-59-8 (3688)
2,3,4-Trihydroxybenzenesulfonic acid; (HO)3.C6H2.SO3H

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	oth/un	?	1.0M	U		K1=5.86	1966TKb (44307)	280

Medium: KOH

****

C6H6O8S2 H4L Tiron CAS 149-45-1 (104)
4,5-Dihydroxybenzene-1,3-disulfonic acid; (HO)2.C6H2(SO3H)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	35°C	0.20M	M		K1=13.80	1982LTa (44420)	281
Er+++	gl	NaClO4	25°C	0.50M	C		K1=12.89 B2=22.40	1976LAb (44421)	282
							B(ErHL2)=30.01		
Er+++	gl	NaClO4	25°C	0.10M	U		K1=14.48	1970SSi (44422)	283
							K(Er+HL)=5.45		

****

C6H7N L Aniline CAS 62-53-3 (583)
Aminobenzene, aniline; C6H5.NH2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	non-aq	25°C	100%	U	HM		1982KNa (44869)	284
							K(ErA3+L)=1.93		

Medium: CCl4. HA=dipivaloylmethane

****

C6H7NO HL 2-Aminophenol CAS 95-55-6 (2868)
2-Amino-1-hydroxybenzene; HO.C6H4.NH2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	mixed	25°C	50%	U	I	K1=4.41 B2=8.38	1969BCa (44926)	285

Medium: 50% DMSO, 0.12 M NaClO4. In 0.12 M NaClO4, 50% dioxan: K1=5.52, K2=4.14. Medium: 0.12 NaClO4, 50% EtOH: K1=4.89, K2=4.11

****

C6H7O3F3 HL (7057)
3-Oxa-7-trifluorohepta-4,6-dione; CH3CH2.O.CO.CH2.CO.CF3

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

```
------------------------------------------------------------------------------
Er+++      gl  diox/w 25°C  50%  M  I     K1=6.14   B2=11.43  1994SSa (45184) 286
                                          K3=4.14
Medium: 50% dioxan, I=0 corr. At 35 C: K1=6.00, K2=5.22, K3=3.88
******************************************************************************
C6H8O4                H2L                      CAS 2583-25-7  (958)
2-Allylpropanedioic acid; HOOC.CH(CH2.CH:CH2).COOH
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  KCl    25°C 0.20M U        K1=4.10        1989ZPa (45466) 287
In 70.4% v/v EtOH/H2O: K1 = 6.14
******************************************************************************
C6H8O6                H2L    Ascorbic acid    CAS 50-81-7  (285)
Ascorbic acid (Vitamin C);
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 2.00M U  IH                  1988HSa (45632) 288
                                          K(Er+HL)=1.45
DH=8.0 kJ mol-1, DS=54.6 J K-1 mol-1
In  0.1 M NaClO4, K=1.4,  DH=8.0 kJ mol-1, DS=55 J K-1 mol-1
------------------------------------------------------------------------------
Er+++      sp  oth/un   ?     ?  U                     1966SAb (45633) 289
                                          K(Er+HL)=0.5
------------------------------------------------------------------------------
Er+++      sp  oth/un   ?  0.30M U        K1=9.03        1966SAb (45634) 290
******************************************************************************
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
------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 0.10M U TIH    K1=5.09        1986AJc (45692) 291
DH(K1)=-6.4 kJ mol-1, DS=76.1 J K-1 mol-1
------------------------------------------------------------------------------
Er+++      gl  NaClO4 30°C 0.10M U  IH    K1=4.71   B2=8.06   1983ASa (45693) 292
DH(K1)=-4.7 kJ mol-1, DH(K2)=3.4
******************************************************************************
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
------------------------------------------------------------------------------
Er+++      gl  KNO3   25°C  1.0M M                  1986SZb (46073) 293
                                          K(Er+H3L=ErHL+2H)=-2.59
                                          K(Er+H3L=ErL+3H)=-5.94
                                          K(Er+H3L=ErH-1L+4H)=-11.33
                                          K(Er+2H3L=ErH2L2+4H)=-6.65
K(Er+2H3L=ErL2+6H)=-13.74, K(Er+2H3L=ErH-2L2+8H)=-28.8,
```

K(Er+2H3L=ErH-3L2+9H)=-27.8, K(Er+2H3L=ErH-4L2+10H)=-37.2.

Er+++ gl KNO3 25°C 0.10M U M 1975TDa (46074) 294
B(Er(IDA)L)=10.5

Er+++ dis NaClO4 25°C 0.15M U 1973HHc (46075) 295
K(Er+HL+L)=11.32

Er+++ gl alc/w 25°C 25% U I K1=8.75 1972BKd (46076) 296
Medium: EtOH/H2O, 0.05 M (NaCl,NaClO4). 0%, K1=7.86, 50%, K1=9.94

Er+++ dis oth/un ? ? U 1972PGd (46077) 297
K(Er+HL+L)=10.34

****

C6H8O7 H3L (6770)
Carboxymethoxysuccinic acid; HOOC.CH2.O.CH(COOH)CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	EMF	NaClO4	25°C	1.00M	U		K1=6.25 B2=10.40	1991WPb (46328)	298

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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
Er+++	ISE	NaClO4	25°C	0.10M	C	I	K1=11.82	1997LBb (46775)	299

Method: Cu ISE and competitive complexation by Cu. Data for 0.1-5.0 M.
At I=0.0 M, K1=13.66.

Er+++ ISE KNO3 25°C 0.10M C K1=12.01 1980NSf (46776) 300
Competitive method using Cd ion-selective electrode.

Er+++ gl KNO3 20°C 1.0M C K2=8.20 1978GHb (46777) 301

Er+++ gl NaClO4 25°C 0.50M U K1=11.76 1977GGb (46778) 302

Er+++ EMF KCl 25°C 1.0M U M 1977GMa (46779) 303
K(ErA+L)=5.95
K(ErA+H2L)=1.64
K(ErA+H3L)=2.05
K(ErA+H4L)=3.43
Method: Pt/H2 electrode. H3A is N-hydroxyethyl-1,2-diaminoethane-N,N',N'-triethanoic acid.

Er+++ cal KNO3 20°C 0.10M U HM 1971GKb (46780) 304
K(ErA+L)=3.52
H4A=EDTA. DH(ErA+L)=-30.25 kJ mol-1, DS=-35.6 J K-1 mol-1.
DH(ErAL)=-37.4 kJ mol-1, DS=301 J K-1 mol-1

```
Er+++      gl  oth/un 20°C 0.20M U                        1970VMa (46781) 305
                                        B(ErL(OH))=6.53
--------------------------------------------------------------------------
Er+++      gl  KNO3   25°C 0.10M U T H  T K1=12.03  B2=21.29  1962MFb (46782) 306
15 C: K1=12.03,K2=9.36; 20 C:12.00,9.29; 30 C: 12.09,9.21; 35 C: 12.10,9.14;
40 C: 12.15,9.11. DH(K1)=10.5 kJ mol-1,DS=266; DH(K2)=-16.2, DS=123
--------------------------------------------------------------------------
Er+++      vlt KNO3   20°C 0.10M U                        1957NOa (46783) 307
                                        B(Er2L3)=37.96
**************************************************************************
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
--------------------------------------------------------------------------
Er+++      gl  KNO3   35°C 0.10M U                        1987RRc (47545) 308
                                        K(Er+HL)=4.06
--------------------------------------------------------------------------
Er+++      gl  KNO3   35°C 0.10M U    M                   1986RMb (47546) 309
                                        K(Er+HL)=4.06
K(Er+HL+cytidine)=8.81
--------------------------------------------------------------------------
Er+++      cal oth/un 25°C 0.03M U   H    K1=4.21         1981PBa (47547) 310
--------------------------------------------------------------------------
Er+++      gl  NaClO4 37°C 3.00M U      T K1=4.99   B2=9.91   1971JWa (47548) 311
                                        B(ErHL)=11.40
--------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 3.00M U      T K1=4.49   B2=8.99   1970JWa (47549) 312
                                        B(ErHL)=11.18
**************************************************************************
C6H10O2S               HL                        (4370)
Ethyl thioacetoacetate; CH3.CS.CH2.CO.OCH2.CH3
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Er+++      gl  mixed  30°C  75%  U        K1=7.56   B2=13.78  1970DRa (47961) 313
                                        K3=6.00
Medium: 75% acetone, 0.1 M
**************************************************************************
C6H10O3                HL                      CAS 16841-19-3  (3649)
1-Hydroxycyclopentanecarboxylic acid; HO.C5H8.COOH
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 0.10M U        K1=3.066  B2=5.65   1966PRb (47987) 314
                                        K3=1.82
                                        K4=1.72
**************************************************************************
C6H10O3                HL                      CAS 141-97-9  (3068)
Ethyl acetoacetate; CH3.CO.CH2.CO2.C2H5
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--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Er+++      gl  mixed  30°C  75%  U        K1=6.88   B2=12.96  1969DRa (48011) 315
Medium: 75% acetone, 0.1 M NaClO4
********************************************************************************
C6H10O4               H2L    Adipic acid      CAS 124-04-9  (401)
1,6-Hexanedioic acid; HOOC.(CH2)4.COOH
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 0.10M M   H    K1=3.05        1986CDb (48069) 316
DH=19.3 kJ mol-1, DS=123 J K-1 mol-1
--------------------------------------------------------------------------------
Er+++      sol oth/un 25°C 0.50M U        K1=2.43        1970MKe (48070) 317
********************************************************************************
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
--------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 1.00M C   H    K1=2.01   B2=3.15   1974GGa (48240) 318
                                          B(ErHL)=5.15
********************************************************************************
C6H10O6               H2L                      CAS 23243-68-7  (242)
1,2-Bis(carboxymethoxy)ethane; HOOC.CH2.O.CH2.CH2.O.CH2.COOH
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Er+++      oth NaClO4 25°C 0.10M U        K1=4.53        1984AFa (48336) 319
Laser excitation spectroscopy, competition method.
--------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 1.00M C   H    K1=4.61   B2=8.04   1974GGa (48337) 320
                                          B3=8.94
                                          B(ErHL2)=9.41
********************************************************************************
C6H10O8               H2L    Saccharic acid   CAS 87-73-0  (1191)
D-2,3,4,5-Tetrahydroxy-1,6-hexanedioic acid, Glucaric acid; HOOC.(CHOH)4.COOH
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 0.10M U    M   K1=4.64        1997PPb (48471) 321
                                          K(Er(edta)+L)=4.21
********************************************************************************
C6H11NO5              H2L    HIMDA            CAS 93-62-9  (192)
N-(2-Hydroxyethyl)iminodiethanoic acid; HO.CH2.CH2.N(CH2.COOH)2
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Er+++      gl  KNO3   20°C 1.00M U        K1=8.32   B2=16.11  1974CMd (48715) 322
```

K(ErL2(OH)+H)=9.73

Er+++ oth NaNO3 20°C 0.10M U M K1=9.1 B2=17.10 1966JMc (48716) 323

Method: paper electrophoresis. Mixed complexes with HEDTA

Er+++ vlt KCl 25°C 0.10M U B2=16.30 1965DTa (48717) 324

Er+++ ISE KNO3 25°C 0.10M U K1=9.24 B2=17.22 1963TLa (48718) 325

****

C6H12N2O4 H2L EDDA CAS 5657-17-0 (119)

1,2-Diaminoethane-N,N'-diethanoic acid; HOOC.CH2.NH.CH2.CH2.NH.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	R4N.X	25°C	0.10M	C		K1=8.59		1988CCb (49232)	326
Er+++	gl	NaClO4	25°C	1.00M	C	H	K1=8.51	B2=15.94	1974GGa (49233)	327
							B(ErH2L)=17.57			
Er+++	gl	KNO3	25°C	0.10M	U		K1=8.59	B2=16.04	1962THb (49234)	328

****

C6H12O3 HL DiEtGlycolic CAS 3639-21-2 (421)

2-Ethyl-2-hydroxybutanoic acid; (C2H5)2.C(OH).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	EMF	NaClO4	25°C	1.0M	U		K1=3.11	B2=5.27	1965TVa (49458)	329
							K3=1.33			
							K4=0.95			

Method: quinhydrone electrode

****

C6H12O4 HL CAS 1112-33-0 (1246)

2,3-Dihydroxy-2,3-dimethylbutanoic acid; (CH3)2.C(OH).C(OH)(CH3).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	U		K1=3.38	B2=5.82	1979PPa (49491)	330
							K3=1.74			

****

C6H12O7 HL Gluconic acid CAS 526-95-4 (904)

D-Gluconic acid, 2,3,4,5,6-Pentahydroxyhexanoic acid; HO.CH2(CHOH)4.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	EMF	alc/w	?	40%	U	I	K1=4.31	1968RKa (49707)	331

Medium: 20-60% MeOH, 0.02 M. K1(20%)=3.64, K1(60%)=5.09

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	alc/w	20°C	80%	U	I	K1=4.9	1967RKa (49708)	332

Medium: 80% MeOH. K1=2.9(0%)

```
Er+++      EMF alc/w  25°C  80%  U  I     K1=5.56        1966KRb (49709) 333
Medium: 80% MeOH. K1=4.68(50%)
-------------------------------------------------------------------------------
Er+++      gl  KCl    25°C 0.20M U        K1=2.36   B2=4.53   1963KOc (49710) 334
*******************************************************************************
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
-------------------------------------------------------------------------------
Er+++      gl  KNO3   25°C 0.20M U    M   K1=6.20        1990LSb (50071) 335
                                         K(Er(phen)+L)=6.15
*******************************************************************************
C6H13NO2               HL    Norleucine       CAS 616-06-8  (602)
2-Aminohexanoic acid (2-Aminocaproic acid) CH3.(CH2)3.CH(NH2).COOH
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Er+++      gl  NaClO4 22°C 0.10M M    M   K1=5.46   B2=10.35  1991DTa (50175) 336
                                         B3=14.30
                                         K(ErA+L)=9.57
H4A=trans-cyclohexane-1,2-diaminotetraethanoic acid. Definitions wrong?
-------------------------------------------------------------------------------
Er+++      gl  KCl    20°C 0.20M U        K1=4.08   B2=8.18   1990PLa (50176) 337
*******************************************************************************
C6H13NO2               HL                    CAS 60-32-2  (1846)
6-Aminohexanoic acid; H2N.CH2.CH2.CH2.CH2.CH2.COOH
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Er+++      gl  KCl    20°C 0.20M U        K1=5.09   B2=10.77  1990PLa (50214) 338
*******************************************************************************
C6H13NO4               HL    Bicine           CAS 150-25-4  (2124)
N,N-Bis(2-hydroxyethyl)glycine; (HO.CH2.CH2)2N.CH2.COOH
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Er+++      gl  KNO3   20°C 0.10M U        K1=5.36   B2=10.23  1982RFa (50350) 339
-------------------------------------------------------------------------------
Er+++      gl  KCl    30°C 0.10M U        K1=5.38   B2=9.49   1973MSe (50351) 340
-------------------------------------------------------------------------------
Er+++      gl  alc/w  20°C  50%  U  I     K1=6.60        1970KRa (50352) 341
Medium: 0-80% MeOH, 0.03 M KCl. K1(0%)=5.39, K1(20%)=5.91, K1(80%)=7.83
-------------------------------------------------------------------------------
Er+++      EMF alc/w  20°C  50%  U  I     K1=6.58        1968KRc (50353) 342
Medium: 0-80% MeOH, 0.02 M. K1(0%)=5.41, K1(20%)=5.88, K1(60%)=7.06,
K1(80%)=7.82
-------------------------------------------------------------------------------
Er+++      oth NaNO3  20°C 0.10M U        K1=7.7    B2=13.60  1966JMc (50354) 343
Method: paper electrophoresis
```

****

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
Er+++	gl	NaCl	37°C	0.15M	U	M	K1=3.29 B(ErHL)=10.20 B(ErH2AL)=24.45		1997GMa (50575)	344

Ligand is DL-citrulline. HA is L-hydroxyproline.

****

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
Er+++	ISE	non-aq	25°C	100%	C	H	K1=5.59	B2=6.65	1993CCb (52194)	345

Medium: DMSO, 0.1 M Et4NClO4. Method: Ag+ ISE. By calorimetry, DH(K1)=-51.2 kJ mol-1, DS=-65; DH(B2)=-81.6, DS=-146.

****

C6H20N2O12P4 H8L EDTPA CAS 1429-50-1 (434)
Ethane-1,2-bis(iminobis(methylenephosphonic acid)); ((H2O3PCH2)2NCH2.)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	C		K(ErL+H)=7.36 K(ErHL+H)=6.09		1991SKb (52329)	346

****

C7H4N2O7 H2L CAS 609-99-4 (400)
3,5-Dinitrosalicylic acid; (O2N)2.C6H2(OH).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	oth/un	24°C	0.20M	U		K1=5.43		1972PSd (52475)	347

Medium: LiCl

****

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
Er+++	cal	NaClO4	25°C	0.50M	C	H			1963GRd (52764)	348

DH(K1)=-7.74 kJ mol-1, DS(K1)=141 J K-1 mol-1; DH(B2)=-24.07, DS(B2)=232; DH(B3)=-56.09, DS(B3)=232.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	ISE	oth/un	20°C	0.50M	U		K1=8.77 K3=5.74	B2=16.39	1961GRa (52765)	349

****

C7H5NO4 HL CAS 121-92-6 (490)

3-Nitrobenzoic acid; O2N.C6H4.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C	H	K1=1.64		1986CLc (52864)	350

DH=9.5 kJ mol-1, DS=63 J K-1 mol-1

****

C7H5NO4 HL CAS 62-23-7 (489)

4-Nitrobenzoic acid; O2N.C6H4.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	M	H	K1=1.67		1999YKa (52905)	351

By calorimetry: DH(K1)=10.07 kJ mol-1, DS(K1)=65.8 J K-1 mol-1.

****

C7H5O2F HL CAS 445-29-4 (5711)

3-Fluorobenzoic acid; F.C6H4.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C	H	K1=1.76		1986CLc (53233)	352

DH=8.9 kJ mol-1, DS=63 J K-1 mol-1

****

C7H5O2F HL CAS 456-22-4 (5710)

4-Fluorobenzoic acid; F.C6H4.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C	H	K1=1.88		1986CLc (53253)	353

DH(K1)=9.6 kJ mol-1, DS=68 J K-1 mol-1

****

C7H5O6BrS H2L (1626)

3-Bromo-5-sulfosalicylic acid; Br.C6H2(OH)(COOH).SO3H

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C	H T	B(1,1,1)=12.30 B(1,0,1)=7.72 B(1,0,2)=13.19 B(1,-1,1)=0.36		1993ALa (53366)	354

B(p,q,r); pEr+qH+rL=(Er)pHqLr. B(1,-2,1)=-7.17.

****

C7H6O2 HL Tropolone CAS 533-75-5 (3129)

2-Hydroxycyclohepta-2,4,6-trien-1-one;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	U		K1=7.54 K3=5.24	B2=13.91	1969CMb (53670)	355

K4=3.96

****

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
Er+++	cal	NaClO4	25°C	0.10M	U	H	K1=1.92	B2=3.63	1982CBc (53829)	356

DH1= 11.3 kJ mol-1, DS1= 75 J K-1 mol-1

****

C7H6O3 H2L Salicylic acid CAS 69-72-7 (14)

2-Hydroxybenzoic acid, Salicylic acid; HO.C6H4.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.1M	C	H		1996HYa (54187)	357

By calorimetry: DH(K1)=3.81 kJ mol-1, DH(B2)=6.31 J K-1 mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C	T		1989HMa (54188)	358
							K(Er+HL)=1.78		
							K(ErHL+HL)=1.81		

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	ix	mixed	20°C	50%	U			1976TRa (54189)	359
							K(Er+HL)=2.42		
							K(Er+HL)=1.82		
							K(Er+3HL)=5.92		

Medium: 50% v/v acetone/H2O, 0.25 M NaClO4

****

C7H6O3 H2L CAS 99-06-9 (1370)

3-Hydroxybenzoic acid; HO.C6H4.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C	H		1988LLa (54377)	360
							K(Er+HL)=1.90		

DH=11.96 kJ mol-1, DS=76.4 J K-1 mol-1

****

C7H6O3 H2L CAS 99-96-7 (1371)

4-Hydroxybenzoic acid; HO.C6H4.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	M	H	K1=1.70		1999YKa (54411)	361

By calorimetry: DH(K1)=13.84 kJ mol-1, DS(K1)=79.0 J K-1 mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C	H		1988LLa (54412)	362
							K(Er+HL)=2.05		

DH=12.98 kJ mol-1, DS=82.7 J K-1 mol-1

****

C7H6O6S H3L CAS 5965-83-3 (399)

5-Sulfosalicylic acid, 2-Hydroxy-5-sulfobenzoic; HO3S.C6H3(OH).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	20°C	1.0M	U		K1=7.20	B2=13.02	1972CBb (54967)	363
Er+++	sp	NaClO4	20°C	0.10M	U		K1=8.15	B2=14.45	1968KTb (54968)	364
							K(Er+HL)=2.12			

C7H6O9S2 H3L CAS 56507-30-3 (2659)
3,5-Disulfosalicylic acid; (HO3S)2.C6H2(OH).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.50M	C	T	K1=8.81	B2=14.64	1976LAc (55094)	365

C7H7NO2 HL Anthranilic CAS 118-92-3 (1589)
2-Aminobenzoic acid, Anthranilic acid; H2N.C6H4.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C		K1=2.16	B2=4.21	1989HMa (55219)	366
Er+++	gl	NaClO4	25°C	0.10M	U	H	K1=4.51		1982KYc (55220)	367

By calorimetry, DH(K1)=8.58 kJ mol-1, DS(K1)=115.14 J K-1 mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	non-aq	25°C	100%	U		K1=7.35	B2=13.32	1970BBh (55221)	368
							K3=3.69			
							K4=2.38			

Medium: MeOH, 0.1 M NaCl

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
Er+++	gl	NaClO4	25°C	0.10M	M	H	K1=1.94		1999YKa (55376)	369

By calorimetry: DH(K1)=11.21 kJ mol-1, DS(K1)=74.7 J K-1 mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KCl	25°C	0.20M	U		K1=2.20		1977EBa (55377)	370

C7H7NO3 H2L CAS 89-73-6 (204)
2-Hydroxybenzohydroxamic acid (salicylhydroxamic acid); HO.C6H4.CO.NHOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	mixed	25°C	75%	U				1970SEa (55591)	371
							K(Er+HL)=7.82			
							K(ErHL+HL)=7.03			
							K(Er(HL)2+HL)=5.10			

Medium: 75% acetone, 0.1 M NaClO4

****

C7H7NO6S H3L CAS 6201-86-1 (7899)
3-Amino-5-sulfosalicylic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KCl	25°C	0.20M	M	T H	K1=8.51		1991BPb (55686)	372
							K(Er+OH+L)=15.43			

DH(K1)=-101 kJ mol-1, DS(K1)=-175 J K-1 mol-1.
Also data for 35, 45 and 55 C.

****

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
Er+++	gl	mixed	25°C	50%	U	I	K1=4.60	B2=8.72	1969BCb (56065)	373

Medium: 50% DMSO, 0.12 M NaClO4. In 40% dioxan, 0.12 M NaClO4: K1=5.77, K2=4.62; 50% EtOH, 0.12 M NaClO4: K1=5.27, K2=4.33

****

C7H8O4 HL Methyl kojic CAS 1506-07-8 (2686)
3-Hydroxy-6-(hydroxymethyl)-2-methyl-4H-pyran-4-one;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	sp	KCl	25°C	0.10M	M	I	K1=6.64		1986PLb (56125)	374

****

C7H8O5 HL CAS 2029-29-4 (2687)
3-Hydroxy-2,6-bis(hydroxymethyl)-4H-pyran-4-one;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	sp	KCl	25°C	0.10M	M	I	K1=6.30		1986PLb (56144)	375

****

C7H10O4 H2L CAS 5802-62-3 (71)
Cyclopentane-1,1-dicarboxylic acid; C5H8.(COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	U		K1=4.24	B2=6.76	1971PJb (56730)	376

****

C7H11NO4 H2L CAS 499-82-1 (3163)
Piperidine-2,6-dicarboxylic acid; C5H9N(COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	U		K1=6.42	B2=12.07	1963THb (56804)	377

****

C7H11NO6 H3L (2926)

2-Aminobutanoic-N-propane-1,3-dioic acid; HOOC.CH(C2H5)NH.CH(COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	25°C	0.1M	U		K1=9.17		1982KKc (56842)	378

C7H11NO6 H3L MNTA (1026)
Nitrilo(2-propanoic)-diethanoic acid; HOOC.CH(CH3).N(CH2.COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	20°C	0.10M	U		K1=12.70	B2=22.19	1974RMg (56909)	379

C7H12N2O3 HL Gly-Pro CAS 704-15-4 (257)
Glycyl-proline; H2N.CH2.CO.NC4H7.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	25°C	0.15M	M T	H	K1=4.02		1983SKb (57119)	380

Data for 35 and 45 C. At 35 C, DH(K1)=19 kJ mol-1, DS(K1)=141 J K-1 mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	25°C	0.15M	U T	H	K1=4.04		1979SKe (57120)	381

At 35 C, K1=4.09; at 45 C, K1=4.13. At 35 C, DH(K1)=8.13 kJ mol1-1, DS(K1)=105 J K-1 mol-1

C7H12O3 HL CAS 609-69-8 (3731)
2-Hydroxycyclohexanecarboxylic acid; HO.C6H10.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	oth	oth/un	?	?	U		K1=2.58	B2=4.52	1970GNd (57259)	382
							K3=1.96			
Er+++	gl	NaClO4	25°C	1.0M	U		K1=2.48	B2=4.83	1967STd (57260)	383

C7H12O3 HL (4422)
3-Methyl ethylacetoacetate; CH3.CO.CH(CH3).CO.OCH2.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	mixed	30°C	75%	U		K1=8.62		1971DRb (57272)	384

Medium: 75% acetone, 0.1 M

C7H12O4 H2L CAS 510-20-3 (482)
Diethylpropanedioic acid (Diethylmalonic acid); HOOC.C(C2H5)2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	U		K1=4.66	B2=7.26	1968PFa (57361)	385

C7H12O6 HL Quinic acid CAS 77-95-2 (2578)
1,3,4,5-Tetrahydroxycyclohexane-1-carboxylic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaCl	20°C	0.10M	U		K1=2.88		1977SSc (57395)	386
Er+++	EMF	NaClO4	25°C	1.0M	U		K1=2.85 K3=1.63 K4=0.96	B2=5.05	1967OTa (57396)	387

Method: quinhydrone electrode

****

C7H13NO6 H2L CAS 32013-58-4 (6079)
N-(2,3-Dihydroxypropyl)iminodiethanoic acid; HO.CH2.CH(OH).CH2.N(CH2.COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	20°C	0.10M	U		K1=8.88	B2=16.82	1980RPa (57610)	388

****

C7H14O3 HL CAS 63204-98-9 (3738)
2-Hydroxy-2,4-dimethylpentanoic acid; (CH3)2.CH.CH2.C(CH3)(OH).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	EMF	NaClO4	25°C	1.0M	U		K1=3.24 K3=1.89 K4=1.09	B2=5.87	1965TVa (57860)	389

Method: quinhydrone electrode

****

C7H14O3 HL CAS 65311-45-1 (6266)
3-Hydroxy-3,4-dimethyl-pentanoic acid; CH3.CH2.C(OH)(CH3).CH(CH3).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C		K1=2.95	B2=4.81	1976SPa (57872)	390

****

C7H15NO4 HL CAS 41244-51-3 (4459)
N,N-Bis(2'-hydroxyethyl)alanine; (HO.CH2.CH2)2.N.CH(CH3)COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	20°C	0.10M	U		K1=5.13	B2=9.71	1982RFa (57934)	391

****

C8H5N5O6 H3L Murexide (453)
Purpuric acid (Murexide is ammonium salt);

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	sp	non-aq	25°C	100%	C		K1=5.70		2003ZRa (58497)	392

Medium: DMSO.

Er+++ sp KNO3 12°C 0.10M U 1965GEa (58498) 393
K(Er+H2L)=3.48
****
C8H5O2F3S HL TTA CAS 326-91-0 (165)
4,4,4-Trifluoro-1-(2-thienyl)butane-1,3-dione; F3C.CO.CH2.CO.C4H3S

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ cal non-aq 25°C 100% C H 2004MIa (58612) 394
Method: calorimetric titration. Medium: chloroform. DH(ErL3+A)=4.7 kJ mol-1, DS=71 J K-1 mol-1; DH(ErL3+2A)=-2.6, DS=91. HA is benzoic acid.

Er+++ gl alc/w 22°C 80% U K1=6.37 B2=12.29 1995MTa (58613) 395
K3=4.94
Medium: 0.1 M NaClO4 in 80% (v/v) EtOH/H2O.

Er+++ gl mixed 25°C 50% U K1=5.97 1980SBc (58614) 396
Medium: 50% MeCN
****
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
---
Er+++ gl NaClO4 30°C 0.10M U K1=4.43 B2=7.79 1966KPb (58966) 397
****
C8H6O4 H2L Isophthalic aci CAS 212-91-5 (1619)
Benzene-1,3-dicarboxylic acid; C6H4(COOH)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ cal NaClO4 25°C 0.10M U H K1=2.58 1982CBc (59050) 398
DH= 16.22 kJ mol-1, DS= 104 J K-1 mol-1
****
C8H7NO2 HL CAS 532-54-7 (4363)
Isonitrosoacetophenone, Phenylglyoxal 2-oxime;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl diox/w 20°C 50% U K1=6.37 B2=12.04 1971MAf (59099) 399
Medium: 50% v/v dioxan, 0.1 M NaClO4
****
C8H7O2Cl HL CAS 1450-74-4 (6325)
2-Hydroxy-5-chloro-acetophenone; Cl(HO)C6H3.CO.CH3

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl alc/w 25°C 20% M TIH K1=6.498 2000KDa (59216) 400
K(Er(egta)+L)=3.564

Medium contains 0.1 M NaNO3. Data for 0.05, 0.15 M NaNO3 and 35 and 45 C.
At I=0, K1=6.705, K(Er(egta)+L)=3.740. DH(Er(egta)L)=-17.2 kJ mol-1.
****

C8H8N2O2 HL Phenylglyoxime (3222)
Phenylglyoxime; C6H5.C(:N.OH).CH:N.OH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	diox/w	20°C	50%	U		K1=7.48 B2=14.02	1971MAf (59334)	401

Medium: 50% dioxan, 0.1 M NaClO4
****

C8H8O2 HL 2-Acetylphenol CAS 118-93-4 (1888)
2-Hydroxyacetophenone; HO.C6H4.CO.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	alc/w	25°C	20%	M	TIH	K1=6.870	2000KDa (59460)	402
							K(Er(egta)+L)=4.558		

Medium contains 0.1 M NaNO3. Data for 0.05, 0.15 M NaNO3 and 35 and 45 C.
At I=0, K1=7.118, K(Er(egta)+L)=4.772. DH(Er(egta)L)=-20.1 kJ mol-1.
****

C8H8O2 HL Phenylacetic CAS 103-82-2 (1361)
Phenylethanoic acid; C6H5.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.1M	C	H	K1=1.70	1996HYa (59541)	403

By calorimetry: DH(K1)=16.34 kJ mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C	H	K1=1.70	1990HYa (59542)	404

By calorimetry: DH(K1)=16.3 J K-1 mol-1
****

C8H8O2 HL CAS 583-80-2 (3191)
beta-Methyltropolone;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	alc/w	?	3%	U		K1=7.57	1967GDb (59595)	405

Medium: 3% EtOH, 0.2 M NaClO4
****

C8H8O3 H2L CAS 490-78-8 (6324)
2,5-Dihydroxyacetophenone; (HO)2C6H3.CO.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	alc/w	25°C	20%	M	TIH	K1=6.632	2000KDa (59677)	406
							K(Er(egta)+L)=4.732		

Medium contains 0.1 M NaNO3. Data for 0.05, 0.15 M NaNO3 and 35 and 45 C.
At I=0, K1=6.846, K(Er(egta)+L)=4.938. DH(Er(egta)L)=-19.6 kJ mol-1.
****

C8H8O3 HL o-Anisic acid CAS 579-75-9 (2337)
2-Methoxybenzoic acid; CH3O.C6H4.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	M	H	K1=1.82	1988CLb (59727)	407

DH=10.6 kJ mol-1, DS=70 J K-1 mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	KCl	25°C	0.10M	U		K1=1.45 B2=2.11	1981MTc (59728)	408

****

C8H8O3 HL Mandelic Acid CAS 611-72-3 (80)
2-Phenyl-2-hydroxyethanoic acid; C6H5.CH(OH).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C		K1=3.15 B2=5.41	1989HMa (59822)	409
Er+++	gl	NaClO4	25°C	2.0M	U	T	K1=2.68	1972DCb (59823)	410

****

C8H8O3 HL m-Anisic acid CAS 586-38-9 (2804)
3-Methoxybenzoic acid; CH3O.C6H4.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	M	H	K1=2.01	1988CLb (59909)	411

DH=12.8 kJ mol-1, DS=81 J K-1 mol-1

****

C8H8O3 HL p-Anisic acid CAS 100-09-4 (1373)
4-Methoxybenzoic acid; CH3O.C6H4.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	M	H	K1=2.00	1988CLb (59950)	412

DH=15.3 kJ mol-1, DS=90 J K-1 mol-1

****

C8H8O4 HL CAS 520-45-6 (4478)
3-Acetyl-2-hydroxy-6-methylpyran-4-one, Dehydroethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	diox/w	35°C	50%	U		K1=4.96 B2=8.92	1971MAa (60085)	413

Medium: 50% dioxan, 0.1 M NaClO4

****

C8H9NO4 H2L (4520)
Dehydroethanoic acid oxime;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	diox/w	35°C	50%	U			1971MAa (60491)	414

K(Er+HL)=4.83

K(Er+2HL)=8.55
Medium: 50% dioxan, 0.01 M NaClO4
****
C8H10O4 L CAS 34241-51-5 (5701)
3-Acetyl-6-methylhydropyrane-2,4-dione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl alc/w 22°C 20% U K1=4.86 B2=8.58 1988ZTa (60846) 415
K3=3.45
****
C8H10O5 H2L CAS 145-73-7 (138)
7-Oxa-bicyclo[2.2.1]-heptan-2,3-dicarboxylic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KCl 30°C 0.10M C K1=5.87 B2=9.83 1996SZa (60866) 416
For the -5-en-2-exo isomer, K1=6.14, B2=10.87.
****
C8H11NO3 HL Vitamin B6 CAS 65-23-6 (254)
5-Hydroxy-6-methyl-3,4-pyridinedimethanol, Pyridoxine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KCl 25°C 0.1M C K1=3.7 1999DNa (61114) 417
B(ErHL)=11.9
****
C8H11NO8 H4L CAS 7408-20-0 (2608)
Amino-di(butanedioic acid);HN(CH(COOH)CH2.COOH)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KCl 25°C 0.10M U K1=11.50 B2=18.05 1979BEb (61204) 418
B(ErHL)=15.74
****
C8H12N2O3 H2L Barbital CAS 57-44-3 (2744)
5,5-Diethylbarbituric acid, Veronal, Barbitone;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl oth/un 25°C 0.10M U K1=3.000 1987TSb (61434) 419
****
C8H12N2O8 H4L CAS 35039-85-1 (4537)
1,2-Diaminoethane-N,N'-dimalonic acid; (HOOC)2.CH.NH.CH2.CH2.NH.CH(COOH)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KNO3 20°C 0.10M U K1=12.45 B2=18.09 1975DPa (61500) 420

Er+++ gl KNO3 25°C 0.10M U K1=11.29 1972GBd (61501) 421

****

C8H12O2 HL CAS 874-23-7 (3203)
2-Acetylcyclohexanone;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	mixed	25°C	75%	U		K1=9.29	B2=17.77	1971DRa (61668)	422
							K3=8.45			

Medium: 75% acetone, 0.1 M NaClO4

****

C8H12O4 H2L CAS 1076-97-9 (2224)
Cyclohexane-1,4-dicarboxylic acid; C6H10.(COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	M	H	K1=4.29	1986CDb (61707)	423

DH=19.6 kJ mol-1, DS=148 J K-1 mol-1

****

C8H13NO6 H3L (3835)
2-Amino-2-carboxypropane-N,N-diethanoic acid; HOOCC(CH3)2N(CH2COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	20°C	0.10M	U		K1=10.28	B2=17.69	1974RMg (61762)	424

****

C8H13NO6 H3L (5681)
2-Aminobutanoic-N,N-diethanoic acid; CH3CH2CH(COOH)N(CH2COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	20°C	0.10M	U		K1=11.77	B2=20.37	1974RMg (61786)	425

****

C8H14O3 HL CAS 607-97-6 (4489)
3-Ethylethylacetoacetate; CH3.CO.CH(C2H5).CO.OC2H5

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	mixed	30°C	75%	U		K1=9.17	1971DRb (62076)	426

Medium: 75% acetone, 0.1 M

****

C8H16O3 HL CAS 58888-84-9 (3807)
2-Hydroxy-2-propylpentanoic acid; CH3.CH2.CH2.C(OH)(CH2.CH2.CH3).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	EMF	NaClO4	25°C	1.0M	U		K1=3.29	B2=5.53	1965TVa (62632)	427
							K3=2.1			

Method: quinhydrone electrode

****

C8H16O4 L 12-Crown-4 CAS 294-93-9 (174)

1,4,7,10-Tetraoxacyclododecane; cyclo(-O.(CH2.CH2.O)3.CH2.CH2-)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	non-aq	25°C	100%	C		K1=4.85		1989BPa (62669)	428

Medium: anhydrous propylene carbonate, 0.1 M Et4NClO4

****

C8H18N2O10P2 H6L EDDADPO CAS 2310-83-0 (2436)
1,2-Diaminoethane-N,N'-diethanoic-N,N'-dimethylphosphonic acid;
(-CH2.N(CH2.COOH)(CH2.PO3H2))2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KCl	25°C	0.10M	U				1965DKb (62898)	429
							K(Er+HL)=17.7			
							K(Er+H4L)=9.2			

****

C8H18O4 L Triglyme CAS 112-49-2 (2358)
1,2-Bis(methoxyethoxy)ethane; CH3O.C2H4O.CH2.CH2.OC2H4.OCH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	non-aq	25°C	100%	C		K1=3.70		1989BPa (62985)	430

Medium: anhydrous propylene carbonate, 0.1 M Et4NClO4

****

C8H19NO5 L Bis-tris CAS 6976-37-0 (2827)
Bis-(2-hydroxyethyl)imino-tris(hydroxymethyl)methane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaCl	30°C	0.10M	C		K1=2.66		2002NWa (63058)	431
							B(Er2L)=2.00			

Constants expressed on the molality scale.

****

C8H22N2O6P2 H4L CAS 13516-59-1 (3850)
2,2'-(Ethylenedi-imino)bis(propylphosphonic acid);

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KCl	25°C	0.10M	U		K1=13.39		1965DKb (63337)	432
							K(Er+HL)=6.88			

****

C9H5NOI2 HL CAS 83-73-8 (3280)
5,7-Di-iodo-8-hydroxyquinoline;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	diox/w	35°C	75%	U		K1=7.45	B2=13.60	1971MAb (63560)	433
							K3=5.40			

Medium: 75% v/v dioxan, 0.1 M NaClO4

****

C9H5NO4 HL CAS 22308-86-7 (4607)
3-Nitroso-4-hydroxycoumarin (oximidobenzotetronic acid);

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	diox/w	20°C	50%	U		K1=2.83 B2=4.74	1977MBb (63605)	434

****

C9H6NO4BrS H2L CAS 3062-37-1 (3889)
7-Bromo-8-hydroxyquinoline-5-sulfonic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	U		K1=5.69 B2=10.50 K3=4	1973MAa (63693)	435

****

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
Er+++	gl	NaClO4	35°C	0.20M	M		K1=6.13	1982LTa (63787)	436
Er+++	gl	oth/un	20°C	0.10M	U		K1=6.45	1977SKd (63788)	437

****

C9H6N3OClS HL CAS 27004-41-7 (216)
2-(2'-Thiazolylazo)-4-chlorophenol; C3H2NS.N:N.C6H3(Cl).OH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	U		K1=8.18	1974KSa (63922)	438

****

C9H6O6 H3L Hemimellitic ac CAS 569-51-7 (1621)
1,2,3-Benzenetricarboxylic acid; C6H3.(COOH)3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	U	H	K1=4.82 K(Er+HL)=2.84	1994CRa (63966)	439

DH(K1)=22.3 kJ mol-1; DS=167 J K-1 mol-1

****

C9H7N L CAS 91-22-5 (1538)
Quinoline;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.5M	M	H	K1=3.90	1991KBb (64059)	440

By calorimetry: DH(K1)=3.36 kJ mol-1, DS(K1)=85.9 J K-1 mol-1

****

C9H7NO HL Oxine CAS 148-24-3 (504)

8-Hydroxyquinoline (8-quinolinol);

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	sol	none	RT	0.0	U				1981FCa (64251)	441
							Kso(ErL3)=-32.50			
Method: spectrophotometry.										
Er+++	gl	oth/un	20°C	0.10M	U		K1=7.46		1977SKd (64252)	442
Er+++	gl	diox/w	30°C	50%	U		K1=9.39	B2=17.98	1970GMb (64253)	443
Medium: 50% dioxan, 0.3 M NaClO4										

****

C9H7NO2 HL CAS 1127-45-3 (4614)
8-Hydroxyquinoline-N-oxide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	diox/w	30°C	50%	U		K1=7.25		1970GMb (64402)	444
Medium: 50% dioxan, 0.3 M NaClO4										

****

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
Er+++	gl	NaClO4	35°C	0.20M	M		K1=6.65		1982LTa (64531)	445
Er+++	cal	KNO3	20°C	0.10M	U	HM			1971GKb (64532)	446
							K(ErA+L)=4.66			
DH(ErA+L)=-24.95 kJ mol-1, DS=4.18 J K-1 mol-1										
DH(ErAL): DH=-32.10, DS=340.25. H4A=EDTA										
Er+++	gl	oth/un	25°C	0.0	U	H	K1=7.16	B2=13.34	1958FOb (64533)	447
							K3=5.22			
DH(K1)=-22.6 kJ mol-1, DS=63 J K-1 mol-1; DH(K2)=-23.8, DS=38; DH(K3)=-23.4, DS=21										

****

C9H7N3O2S H2L TAR CAS 2246-46-0 (707)
4-(2'-Thiazolylazo)-resorcinol; C3H2NS.N:N.C6H3(OH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	sp	NaNO3	25°C	0.10M	C		K1=8.10		1985OHb (64701)	448
							K(Er+HL)=4.71			
							K(ErL+H)=6.05			

****

C9H8O4 H2L CAS 97652-17-0 (3855)
3-Carboxy-4-methyltropolone;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	sp	NaClO4	?	0.20M	U		K1=8.65 B(ErHL)=10.78		1967GDc (64937)	449
Er+++	gl	NaClO4	25°C	0.20M	U		K1=8.35 K3=4.18	B2=15.20	1966GDa (64938)	450

C9H8O4 H2L CAS 15872-28-3 (8407)
Bicyclo[2.2.1]hepta-2,5-diene-2,3-dicarboxylic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KCl	30°C	0.10M	U		K1=4.33	B2= 7.94	1996SZa (64973)	451

C9H10O2 HL Benzylacetic CAS 501-52-0 (1362)
3-Phenylpropanoic acid; C6H5.CH2.CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.1M	C	H	K1=1.89	B2= 3.40	1996HYa (65365)	452

By calorimetry: DH(K1)=15.15 kJ mol-1, DH(B2)=16.82 J K-1 mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C	H	K1=1.89	B2=3.40	1990HYa (65366)	453

By calorimetry: DH(K1)=15.2 J K-1 mol-1, DH(K2)=1.7

C9H10O3 HL Atrolactic acid CAS 940-31-8 (3859)
2-Hydroxy-2-phenylpropanoic acid; CH3.C(OH)(C6H5).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	1.0M	U		K1=3.03 K3=2.01 K4=1.90	B2=5.51	1966TVa (65436)	454

C9H10O3 HL CAS 1878-49-5 (1600)
2-Phenyl-2-methoxyethanoic acid; C6H5.CH(OCH3)COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C		K1=2.19	B2=3.61	1989HMa (65458)	455

C9H10O3 HL Tropic acid CAS 529-64-6 (1601)
2-Phenyl-3-hydroxypropanoic acid; HO.CH2.CH(COOH)C6H5

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C		K1=1.99	B2=3.93	1989HMa (65472)	456

C9H10O4 H2L (7232)

Bicyclo[2.2.1]hept-5-en-2-endo,3-cis-dicarboxylic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KCl	30°C	0.10M	C		K1=4.20	B2=7.02	1996SZa (65569)	457

For the -2,5-dien-2-exo isomer, K1=4.33, B2=7.94.

****

C9H10O4 H2L CAS 3853-88-1 (5687)
endo-cis-Bicyclo-[2,2,1]-5-hepten-2,3-dicarboxylic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	24°C	0.10M	U		K1=4.46		1986ZBa (65584)	458
							K(Er+HL)=1.55			

****

C9H10O5 H2L CAS 54384-22-4 (8406)
1-Methyl-(exo,exo)-7-oxabicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KCl	30°C	0.10M	U		K1=5.26	B2= 7.91	1996SZa (65601)	459

****

C9H10O5 H2L (7233)
1-Methyl-7-oxa-bicyclo[2.2.1]hept-5-en-2-exo,3-cis-dicarboxylic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KCl	30°C	0.10M	C		K1=5.26	B2=7.91	1996SZa (65616)	460

****

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
Er+++	gl	NaCl	25°C	0.15M	U	H	K1=3.77		1992ZNa (65931)	461

By calorimetry: DH(K1)=4.27 kJ mol-1, DS(K1)=86.51 J K-1 mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KCl	25°C	0.10M	U		K1=4.35	B2=8.25	1972BFe (65932)	462

****

C9H11NO3 H2L Tyrosine CAS 60-18-4 (4)
2-Amino-3-(4-hydroxyphenyl)propanoic acid; HO.C6H4.CH2.CH(NH2).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	U	I			1976SAc (66216)	463
							K(Er+HL)=5.15			
							K(ErHL+HL)=4.86			
Er+++	gl	KNO3	25°C	0.10M	U	T H			1976SAe (66217)	464
							K(Er+H2L)=4.83			

K(ErH2L+H2L)=4.51

Er+++ gl KCl 25°C 0.10M U 1972BFe (66218) 465
K(Er+HL)=4.4
K(ErHL+HL)=4.1

****

C9H12N2O10 H5L CAS 80921-06-8 (2924)
2,3-Diaminopropanoic-N,N'-di-1,3-propanedioic acid;
(HOOC)2CH.NH.CH(COOH).CH2.NH.CH(COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	ISE	KNO3	25°C	0.10M	U		K1=12.25	1983KBd (66733)	466

Hg-electrode.

****

C9H13NO6 H3L (3881)
2,6-Dicarboxypiperidyl-N-ethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	U		K1=11.35 B2=19.77	1968TKe (66883)	467

****

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
Er+++	gl	KNO3	35°C	0.10M	U	M	K1=3.21	1986RMb (67054)	468

K(Er+L+HGly)=8.41, K(Er+L+HHis)=8.54, K(Er+L+oxalate)=9.89

****

C9H15NO6 H3L (7177)
2-Aminopentanoic-N,N-diethanoic acid; C3H7C(COOH)N(CH2COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KNO3	20°C	0.10M	U		K1=11.70 B2=20.24	1974RMg (67406)	469

****

C9H16N2O6 H3L MEDTA CAS 40423-02-7 (5717)
N-Methyldiaminoethane-N,N',N'-triethanoic acid; HOOC.CH2.N(CH3)CH2.CH2.N(CH2.COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	cal	NaClO4	25°C	0.50M	M	IH	K1=13.53	1986RCa (67636)	470

DH=-12.8 kJ mol-1, DS=216 J K-1 mol-1

****

C9H16O4 H2L CAS 1636-27-7 (485)
Dipropylpropanedioic acid (Di-n-propylmalonic acid);

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

Er+++ gl KNO3 25°C 0.10M U K1=4.73 B2=7.35 1968PFa (67770) 471
****
C10H5O2F7S L (6996)
1-(2-Thienyl)-3-heptafluoropropylpropane-1,3-dione; C3F7.C(O)CH2C(O)C4H3S

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl alc/w 22°C 80% U K1=6.38 B2=11.78 1995MTa (68424) 472
K3=5.57
Medium: 0.1 M NaClO4 in 80% (v/v) EtOH/H2O.
****
C10H6O3 HL CAS 481-39-0 (3295)
5-Hydroxy-1,4-naphthoquinone;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl diox/w 25°C 50% C T H K1=8.33 B2=15.75 1992SAa (68474) 473
K3=6.58
At 35 C: K1=8.11, K2=6.84, K3=5.48; DH(K1)=-38.7 kJ mol-1
****
C10H6O8 H4L Pyromellitic Ac CAS 89-05-4 (519)
Benzene-1,2,4,5-tetracarboxylic acid; C6H2.(COOH)4

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl NaClO4 25°C 0.10M U H K1=4.60 1994CRa (68512) 474
K(Er+HL)=3.67
DH(K1)=27.7 kJ mol-1, DS=181 J K-1 mol-1; DH(Er+HL)=14.0, DS=117
****
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
---
Er+++ sp KCl 25°C 0.10M M I K1=4.36 1976PEa (68575) 475
****
C10H7NO2 HL CAS 132-53-6 (2524)
2-Nitroso-1-naphthol;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KNO3 25°C 0.10M U K1=6.00 B2=11.40 1982LPc (68643) 476
****
C10H7NO2 HL Quinaldic acid CAS 93-10-7 (2209)
Quinoline-2-carboxylic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl NaClO4 30°C 0.10M U K1=2.67 B2=5.30 1969DNc (68704) 477
****

C10H7NO2 HL CAS 86-59-9 (873)
Quinoline-8-carboxylic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	30°C	0.10M	U		K1=2.78	1969DNc (68757)	478

****
C10H7NO5S H2L CAS 14090-74-5 (2676)
1-Nitroso-2-hydroxynaphalene-7-sulfonic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KCl	25°C	0.10M	M		K1=4.30	1979LSb (68809)	479

****
C10H7NO5S H2L (4766)
1-Nitroso-2-hydroxynaphthalene-6-sulfonic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	KCl	25°C	0.10M	C		K1=4.41	1973PMb (68841)	480

****
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
Er+++	gl	KCl	25°C	0.10M	U	I	K1=3.09	1967MAi (68882)	481

K1=4.19(I=0)

****
C10H7NO5S H2L CAS 31005-79-9 (1814)
2-Nitroso-1-hydroxynaphthalene-8-sulfonic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	KCl	25°C	0.10M	M		K1=5.01	1978PPb (68942)	482

****
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
Er+++	gl	oth/un	25°C	0.10M	U		K1=5.21 B2=9.55	1990ATa (69005)	483
Er+++	gl	KCl	25°C	0.10M	U		K1=4.65	1968MAe (69006)	484

****
C10H7N5O5 HL CAS 102964-51-2 (6212)
5-(2'-Nitrophenylazo)barbituric acid;

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

Er+++ gl diox/w 25°C 75% U K1=5.58 B2=10.93 1986MIa (69094) 485
****
C10H7O2F3 HL CAS 326-06-7 (196)
3-Benzoyl-1,1,1-trifluoroacetone; CF3.CO.CH2.CO.C6H5

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl alc/w 22°C 80% U K1=7.50 B2=13.29 1995MTa (69141) 486
K3=6.07
Medium: 0.1 M NaClO4 in 80% (v/v) EtOH/H2O.
****
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
---
Er+++ sp non-aq 25°C 100% C T K1=2.92 2005SYa (69549) 487
In ethylacetate; At 50 C K1=2.31
****
C10H8N4O3 HL CAS 43168-60-1 (6209)
5-Phenylazobarbituric acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl diox/w 25°C 75% U K1=5.96 B2=11.52 1986MIa (69728) 488
****
C10H8O2 H2L CAS 92-44-4 (1658)
2,3-Dihydroxynaphthalene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl NaClO4 20°C 0.10M U M 1973PAc (69767) 489
K(ErA+L)=7.90, H4A=EDTA
****
C10H8O5S H3L DHNSA (877)
2,3-Dihydroxynaphthalene-6-sulfonic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl NaClO4 35°C 0.20M M K1=10.17 1982LTa (69840) 490

Er+++ gl NaClO4 25°C 0.50M C K1=10.31 B2=18.67 1976LAd (69841) 491
B(ErHL2)=25.49
****
C10H9N3OS HL CAS 60321-26-8 (4671)
2-(2-Thiazolylazo)methylphenol; C3H2NS.N:N.C6H3(CH3)OH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ sp diox/w 25°C 10% U K1=9.65 B2=19.08 1973KSd (70358) 492

Medium: 10% dioxan, 0.1 M KNO3

****

C10H9N3O2S HL CAS 3012-52-0 (217)

2-(2'-Thiazolylazo)-4-methoxyphenol; CH3O.C6H3(OH).N:N.C3H2N2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	sp	KNO3	25°C	0.10M	U		K1=9.49		1974KSa (70397)	493

****

C10H10N2O4S H2L CAS 52047-96-8 (4782)

4-Sulfophenyl-3-methylpyrazol-5-one;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	sp	oth/un	?	?	U				1966TPa (70580)	494
							K(Er+3HL=ErL3+3H)(?)=2.79			

****

C10H10OS HL CAS 13522-48-0 (4722)

3-Mercapto-1-phenylbut-2-en-1-one; C6H5.CO.CH:CH.C(SH).CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	mixed	30°C	75%	U		K1=4.18	B2=7.88	1969DNb (70634)	495
							K3=3.45			

Medium: 75% acetone, 0.1 M NaClO4

****

C10H10O2 HL Benzoylacetone CAS 93-91-4 (197)

1-Phenylbutane-1,3-dione; C6H5.CO.CH2.CO.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	alc/w	25°C	80%	U		K1=8.47	B2=15.02	1967DZa (70719)	496
							K3=4.55			

Medium: 80% MeOH, 0.1 M NaCl

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	alc/w	24°C	80%	U		K1=8.47	B2=15.02	1967DZb (70720)	497
							K3 = 4.55			

Medium: 80% v/v MeOH/H2O, 0.1 M NaCl

****

C10H10O6 H2L CAS 5411-14-3 (2394)

1,2-Phenylenedioxodiethanoic acid; C6H4(O.CH2.COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	M		K1=3.92		1977HCb (70848)	498

****

C10H11NOS L (2831)

Acetothioacetanilide; CH3.CO.CH2.CS.NH.C6H5

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

```
------------------------------------------------------------------------------
Er+++      gl  diox/w 25°C  50%  U        K1=5.58   B2=10.68  1986NBa (70880) 499
******************************************************************************
C10H11NO2               L                       CAS 102-01-2  (250)
Acetoacetanilide; CH3.CO.CH2.CO.NH.C6H5
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  diox/w 25°C  50%  U        K1=6.15        1986NBa (70909) 500
******************************************************************************
C10H12N2O4            H2L                       CAS 16598-05-3  (967)
2-Pyridylmethyliminodiethanoic acid; C5H4N.CH2.N(CH2.COOH)2
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  KNO3   25°C 0.10M U        K1=9.25   B2=16.90  1964THa (71256) 501
******************************************************************************
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
------------------------------------------------------------------------------
Er+++      gl  KNO3   35°C 0.10M U    M   K1=4.71        1987RRc (71386) 502
                                          B(Er(gly)L)=10.86
                                          B(Er(his)L)=11.09
******************************************************************************
C10H12N4O6            H2L    Xanthosine        CAS 5968-90-1  (1176)
3,9-Dihydro-9-ribofuranosyl-1H-purine-2,6-dione;
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  KNO3   35°C 0.10M U    M                  1987RRc (71486) 503
                                          K(Er+HA+HL)=5.55
                                          K(Er+HB+HL)=6.49
                                          K(Er+HL)=4.63
HA=glycine, HB=histidine.
******************************************************************************
C10H12O2               HL                       CAS 1946-74-3  (202)
3-Isopropyltropolone;
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  alc/w  24°C  80%  U        K1=9.0    B2=16.50  1968DZb (71578) 504
                                         K3=6.2
                                         K4=4.8
Medium: 80% MeOH, 0.1 M NaCl
------------------------------------------------------------------------------
Er+++      sp  alc/w    ?    3%  U        K1=7.49        1967GDb (71579) 505
Medium: 3% EtOH, 0.2 M NaClO4
******************************************************************************
```

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
Er+++	gl	KCl	25°C	0.10M	U		K1=13.23 K(ErHL)=6.66	1980MMe (73122)	506
Er+++	gl	KCl	25°C	0.10M	U		K2=4.10	1979MMe (73123)	507
Er+++	gl	KNO3	20°C	0.10M	U		K1=13.76 B2=18.82	1975DPa (73124)	508
Er+++	vlt	KNO3	25°C	0.10M	U		K1=13.63	1971BGb (73125)	509

****

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
Er+++	sp	oth/un	20°C	0.20M	U	M	K(ErL+oxalate)=1.46	1982ATa (73705)	510
Er+++	gl	NaClO4	20°C	0.02M	U	M	K(ErL+PO4)=3.21	1982MPd (73706)	511
Er+++	vlt	KNO3	20°C	0.10M	U		K1=19.01	1978NLb (73707)	512
Er+++	gl	NaClO4	25°C	0.50M	U		K1=17.45	1977GGb (73708)	513
Er+++	gl	KCl	25°C	1.00M	U		K2=2.13 K(ErL+HL)=1.15 K(2ErL+L)=4.56	1976BKa (73709)	514
Er+++	gl	KCl	25°C	1.0M	U		K(ErL+H)=1.27	1976GMb (73710)	515
Er+++	sp	KCl	25°C	0.10M	U		K2=2.13 K(2ErL+L)=4.56 K(ErL+HL)=1.15	1975BKa (73711)	516
Er+++	EMF	KCl	25°C	0.10M	U	T	K(ErL+H)=0.9	1974BKb (73712)	517
Er+++	gl	KCl	25°C	1.0M	C		K2=2.13 K(ErL+HL)=1.15 K(2ErL+L=Er2L3)=4.56	1974BKe (73713)	518
Er+++	gl	KNO3	25°C	0.10M	U	T M	K(ErL+HA)=4.95 K(ErL+A)=7.01	1973TRb (73714)	519

```
                                        K(ErL+A)=6.1
Also at 2, 35 and 45 C. H5A=tripolyphosphoric acid.  K(ErL+B)=6.1
H4B=ATP. K(2 C)=6.5, K(35 C)=6.2, K(45 C)=6.0
-------------------------------------------------------------------------------
Er+++      sp  oth/un 25°C  2.0M U                      1972TKa (73715) 520
                                        K(ErL+HL)=0.5
-------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 0.10M U    M                 1969AIb (73716) 521
                                        K(ErL+A)=7.45, H4A=tiron
-------------------------------------------------------------------------------
Er+++      dis oth/un 25°C    ?  U        K1=17.89       1969PJa (73717) 522
Method: paper electrophoresis. Medium: pH=1.86
-------------------------------------------------------------------------------
Er+++      ix  KCl    25°C 0.10M U   H    K1=18.37       1959BDb (73718) 523
DH(K1)=6.3 kJ mol-1, DS=373 J K-1 mol-1
-------------------------------------------------------------------------------
Er+++      gl  oth/un 20°C 0.01M U        K1=18.97       1955WSa (73719) 524
-------------------------------------------------------------------------------
Er+++      vlt KNO3   20°C 0.10M U      T K1=18.98       1954SGa (73720) 525
Alternative value K1=18.85
-------------------------------------------------------------------------------
Er+++      gl  KCl    20°C 0.10M U  I   T K1=17.98       1953WSa (73721) 526
By polarography K1=18.38. In 0.1 M KNO3 K1=18.55
-------------------------------------------------------------------------------
Er+++      gl  KCl    20°C 0.10M U        K1=18.15       1952VIa (73722) 527
*******************************************************************************
C10H16N5O13P3         H4L    ATP              CAS 56-65-5  (403)
Adenosine-5'-triphosphoric acid;
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Er+++      gl  KCl    25°C 0.10M U        K1=6.47   B2=10.47  1988SSd (74718) 528
                                        K(Er+HL)=4.04
-------------------------------------------------------------------------------
Er+++      kin oth/un 25°C 0.05M C        K1=7.07        1983MCc (74719) 529
Method: inhibition of the hexokinase reaction, pH 8.0 (0.05 M TAPS).
-------------------------------------------------------------------------------
Er+++      gl  KNO3   35°C 0.10M U    M                 1972TRc (74720) 530
                                        K(Er(EDTA)+L)=6.2
*******************************************************************************
C10H16O2               HL                     CAS 100563-25-5  (4706)
2-Butanoylcyclohexanone; CH3.CH2.CH2.CO.C6H9O
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Er+++      gl  oth/un 30°C 0.10M U        K1=10.72  B2=19.67  1972DSe (74919) 531
                                        K3=9.03
*******************************************************************************
C10H18N2O7             H3L    HEDTA            CAS 150-39-0  (392)
N-(Hydroxyethyl)diaminoethane-N,N',N'-triethanoic acid;
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--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 0.50M U        K1=14.87       1977GGb (75362) 532
--------------------------------------------------------------------------------
Er+++      EMF KCl    25°C  1.0M U        K2=3.95        1977GMa (75363) 533
                                         K(ErL+HL)=2.37
                                         K(ErL+H4L)=1.76
Method: Pt/H2 electrode.
--------------------------------------------------------------------------------
Er+++      EMF KCl    25°C  1.0M U    M                  1977GMa (75364) 534
                                         K(Er(edta)+L)=2.69
                                         K(Er(edta)+HL)=1.89
                                         K(Er(edta)+H2L)=1.97
                                         K(Er(edta)+H3L)=1.22
Method: Pt/H2 electrode.
--------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C  1.0M U        K2=3.23        1973NMa (75365) 535
                                         K(ErL+HL)=2.29
                                         K(ErL+H3L)=1.28
--------------------------------------------------------------------------------
Er+++      gl  oth/un 20°C    ?  U                       1971MNa (75366) 536
                                         K(ErL+HL)=1.96
                                         K(ErL+L)=3.74
--------------------------------------------------------------------------------
Er+++      gl  KNO3   25°C 0.10M U    M                  1963TLb (75367) 537
                                         K(ErL+A)=5.30
                                         K(ErL+B)=4.62
H2A=iminodiethanoic acid, H2B=hydroxyethyliminodiethanoic acid
--------------------------------------------------------------------------------
Er+++      EMF oth/un 20°C 0.10M U        K1=15.61       1962PMa (75368) 538
--------------------------------------------------------------------------------
Er+++      gl  KNO3   15°C 0.10M U T H    K1=15.45       1961MFb (75369) 539
K1=15.45(20 C), 15.42(25 C), 15.41(30 C), 15.46(35 C), 15.42(40 C)
DH(K1)=-1.34 kJ mol-1(25 C), DS=290 J K-1 mol-1
--------------------------------------------------------------------------------
Er+++      gl  KNO3   25°C 0.10M U        K1=15.17       1956SPa (75370) 540
By polarography K1=15.4
********************************************************************************
C10H19N3O4             HL    Leu-Gly-Gly      CAS 1187-50-4  (1230)
Leucyl-glycyl-glycine; H2N.CH(CH2.CH(CH3)2).CO.NH.CH2.CO.NH.CH2.COOH
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
Er+++      gl  KNO3   25°C 0.10M U T H    K1=3.49        1981SKg (75687) 541
Data for 35 and 45 C. DH(K1)=8.16 kJ mol-1, DS(K1)=85.9 J K-1 mol-1.
********************************************************************************
C10H20N2O4             H2L                        (4753)
N,N'-Diethylethylenedinitrilo-N,N'-diethanoic acid;
--------------------------------------------------------------------------------
```

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      gl  KNO3   25°C 0.10M U        K1=7.0         1973PSb (75780) 542
*************************************************************************
C10H20O5                L    15-Crown-5       CAS 33100-27-5  (576)
1,4,7,10,13-Pentaoxacyclopentadecane; cyclo(-(O.CH2.CH2)5-)
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      gl  non-aq 25°C 100%  C        K1=7.50        1989BPa (75998) 543
Medium: anhydrous propylene carbonate, 0.1 M Et4NClO4
-------------------------------------------------------------------------
Er+++      ISE non-aq 25°C 100%  C        K1=5.53        1983ANb (75999) 544
The equilibration took 7-12 days. Medium: PC, 0.10 M Et4NClO4
*************************************************************************
C10H22N2O3              L    Cryptand 2,1     CAS 31249-95-3  (835)
4,7,13-Trioxa-1,10-diazacyclopentadecane (Trioxa(2,1)cryptand);
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      ISE non-aq 30°C 100%  C T H    K1=14.2        1986ALa (76315) 545
Medium: propylene carbonate, 0.1M Et4NClO4. DH and DS given
*************************************************************************
C10H22O5                L    Tetraglyme       CAS 143-24-8  (121)
2,5,8,11,14-Pentaoxapentadecane; (CH3.O.CH2.CH2.O.CH2.CH2.)2O
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      ISE non-aq 25°C 100%  C        K1=3.73        1986BDa (76446) 546
Medium: propylene carbonate, 0.1 M Et4NClO4
*************************************************************************
C10H26N4O6P2          H4L                    CAS 200951-96-8  (7643)
1,4,7,10-Tetraazacyclododecane-1,7-bis(methanephosphonic acid);
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      gl  KCl    25°C 0.10M C        K1=19.2        1998BRa (76802) 547
                                         *K(ErL)=-7.9
                                         K(ErL+H)=7.0
                                         B(ErHL2)=39.2
*************************************************************************
C11H8O3                 L                    CAS 1133-72-8  (2614)
2-Aceto-1,3-indandione;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      gl  mixed  22°C  60%  U        K1=3.91   B2=7.44   1979JMa (77029) 548
                                         K3=3.15
Medium: 60% acetone/H2O
*************************************************************************
```

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
Er+++	gl	diox/w	20°C	50%	U	T	K1=8.34	B2=16.93	1977SKf (77121)	549
							B3=24.91			
							K3=7.98			

****
C11H8O4 HL CAS 7555-37-5 (4812)
3-Acetyl-4-hydroxycoumarin

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	diox/w	35°C	50%	U		K1=4.21	B2=7.33	1971MAa (77173)	550

Medium: 50% dioxan, 0.01 M NaClO4
****
C11H8O6S H3L CAS 66695-90-7 (1996)
1-Hydroxy-4-sulfo-2-naphthoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	C		K1=8.88	B2=15.47	1979LAb (77223)	551
							K(Er+HL)=2.01			

****
C11H8O9S2 H4L CAS 67097-84-1 (1995)
1-Hydroxy-4,7-disulfo-2-naphthoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	cal	NaClO4	25°C	0.10M	C	H	K1=8.86	B2=14.7	1986LLc (77277)	552
							K(Er+HL)=1.88			

DH(Er+HL)=9.2 kJ mol-1, DS=67 J K-1 mol-1
****
C11H9NO4 H2L CAS 4321-82-7 (4829)
3-Acetyl-4-hydroxycoumarin oxime;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	diox/w	35°C	50%	U				1971MAa (77416)	553
							K(Er+HL)=3.90			
							K(Er+2HL)=6.83			

Medium: 50% dioxan, 0.01 M NaClO4
****
C11H9N3O2 H2L PAR CAS 1141-59-9 (636)
4-(2'-Pyridylazo)-1,3-dihydroxybenzene; C5H4N.N:N.C6H3(OH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	sp	NaNO3	25°C	0.10M	C		K1=10.52		1984OHa (77535)	554

K(Er+HL)=4.31
*K(ErHL)=-6.09
Medium pH 4.8-6.3.

Er+++ sp KCl 20°C 0.10M U 1971EKa (77536) 555
K(Er+HL)=3.66

Er+++ sp NaClO4 20°C 0.10M U K1=10.1 1967SNb (77537) 556
K(Er+HL)=11.0
****
C11H10N4O3 HL CAS 92265-24-2 (6211)
5-(2'-Methylphenylazo)barbituric acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl diox/w 25°C 75% U K1=5.97 B2=11.59 1986MIa (77727) 557
****
C11H10N4O4 HL CAS 92265-26-4 (6210)
5-(2'-Methoxyphenylazo)barbituric acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl diox/w 25°C 75% U K1=6.14 B2=11.88 1986MIa (77741) 558
****
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
---
Er+++ gl KCl 25°C 0.10M U T H K1=5.0 1976BFc (78197) 559
For 55C K1= 4.46

Er+++ gl KCl 25°C 0.10M U K1=5.1 B2=9.60 1972BFe (78198) 560
****
C11H12N2O5S HL CAS 56475-09-3 (8410)
3-(4'-Sulfophenylhydrazo)-pentane-2,4-dione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl oth/un 30°C 0.10M U B2=21.83 1985EEb (78317) 561
Medium: not stated. For 3'-sulfophenylhydrazo-, B2=21.98; for 2'-sulfo-
phenylhydrazo-, B2=24.86; for 4'-methyl-2'-sulfophenylhydrazo-, B2=23.74.
****
C11H12O3 HL CAS 94-02-0 (3351)
Ethyl benzoylacetate; C6H5.CO.CH2.CO2.C2H5

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl mixed 25°C 75% U K1=8.77 B2=16.27 1971DRa (78398) 562
Medium: 75% acetone, 0.1 M NaClO4

****

C11H13NO5 H3L HBIDA CAS 7372-13-6 (1603)
N-(2-Hydroxybenzyl)iminodiethanoic acid; HO.C6H4.CH2.N(CH2.COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	C		K1=14.30	B2=25.93	1989YSa (78620)	563
							K(Er+HL)=6.22			
							K(Er+2HL)=12.20			
Er+++	gl	KNO3	20°C	0.10M	U		K1=14.32	B2=25.36	1983MSc (78621)	564

****

C11H14N2O4 H2L (1880)
N-(6-Methyl-2-pyridylmethyl)iminodiethanoic acid; CH3C5H3NCH2N(CH2COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	U		K1=7.42	B2=12.64	1964THa (78880)	565

****

C11H18N2O8 H4L PDTA CAS 4408-81-5 (1655)
1,2-Diaminopropane-N,N,N',N'-tetraethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	vlt	KNO3	20°C	0.10M	U		K1=15.30	1981NSc (79277)	566
Er+++	EMF	KNO3	25°C	0.10M	U		K1=16.40	1980KBc (79278)	567
Er+++	vlt	KNO3	20°C	0.10M	U		K1=19.68	1978NLb (79279)	568
Er+++	vlt	KNO3	20°C	0.10M	U		K1=19.61	1964ICb (79280)	569

****

C11H18N2O8 H4L CAS 38539-29-0 (2573)
1,3-Diaminopropane-N,N'-di(1,4-butanedioic acid)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	U		K1=10.91	1976GKd (79361)	570

****

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
Er+++	ix	KNO3	20°C	0.10M	U	H	K1=14.80	1971AWa (79435)	571

Polarography also used. DH=17.6 kJ mol-1, DS=337 J K-1 mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	vlt	KNO3	20°C	0.10M	U		K1=15.10	1964LAa (79436)	572

By glass electrode: K1=15.15

****

C11H18N2O9 H4L HDPTA CAS 3148-72-9 (431)
1,3-Diamino-2-hydroxypropane-N,N,N',N'-tetraethanoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KNO3 25°C 0.10M M K1=15.09 1986PLc (79549) 573
****
C11H18N2O9 H4L CAS 668-21-1 (2562)
2-Hydroxy-1,3-diaminopropane-N,N'-di(1,4-butanedioic) acid

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KNO3 25°C 0.10M U K1=12.09 1976GKd (79593) 574
****
C11H18O2 HL CAS 40072-58-3 (4820)
2-(3'-Methylbutanoyl)cyclohexanone (2-isovaleryl cyclohexanone);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl mixed 30°C 75% U K1=10.04 B2=19.83 1972DSd (79651) 575
K3=8.41
Medium: 75% acetone
****
C11H18O2 HL CAS 5601-52-5 (4821)
2-Butanoyl-6-methylcyclohexanone (2-butyryl-6-methylcyclohexanone);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl mixed 30°C 75% U K1=10.70 B2=20.81 1972DSd (79662) 576
Medium: 75% acetone
****
C11H20O4 H2L CAS 2283-16-1 (2854)
2,2-Dibutylpropanedioic acid; HOOC.C(C4H9)2.COOH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KNO3 25°C 0.10M U K1=6.74 B2=7.53 1968PFa (79766) 577
****
C12H7O2F7 L (6994)
1-Heptafluoropropyl-3-phenylpropane-1,3-dione; C3F7.CO.CH2.CO.C6H5

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl alc/w 22°C 80% U K1=6.30 B2=11.78 1995MTa (80181) 578
K3=5.32
Medium: 0.1 M NaClO4 in 80% (v/v) EtOH/H2O.
****
C12H8N2 L Phenanthroline CAS 66-71-7 (144)
1,10-Phenanthroline;

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      dis non-aq 25°C 100%  C   HM                  1998YHa (80424) 579
                                        K(ErA3+L)=8.00
Method: solvent extraction from 0.10 M NaClO4 into CHCl3. HA is
1-(2-thienyl)-4,4,4-trifluoro-1,3-butanedione. DH(ErA3+L)=-8 kJ mol-1.
*************************************************************************
C12H12NO3Cl            HL                        (1055)
2-Chloro-4-dimethylamino-benzylidenepyruvic acid; (CH3)2N.C6H3Cl.CH:CH.CO.COOH
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      sp  NaClO4 25°C 0.50M U        K1=2.085       1987MSa (80964) 580
*************************************************************************
C12H12N2O3             HL    Nalidixic acid   CAS 389-08-2  (1401)
1-Ethyl-1,4-dihydro-7-methyl-4-oxo-1,8-naphthyridine-3-carboxylic acid;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      gl  alc/w  22°C  0.1M U        K1=6.40   B2=12.05  2000TBb (81070) 581
                                        K3=4.25
Medium: 0.1 M NaClO4 in 70% v/v EtOH/H2O
*************************************************************************
C12H13NO3              HL                        (1054)
4-Dimethylamino-benzylidenepyruvic acid; (CH3)2N.C6H4.CH:CH.CO.COOH
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      sp  NaClO4 25°C 0.50M U        K1=2.239       1987MSa (81194) 582
*************************************************************************
C12H16O7S              HL                      CAS 204931-01-1  (7817)
2,3-Benzo-1,4,7,10-tetraoxacyclododeca-2-ene-4'-sulfonic acid;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      dis R4N.X  25°C 0.12M C        K1=1.31        1998SUa (81695) 583
Medium: 0.12 M Et4NBr.
Method:solvent extraction into cyclohexane/di(2-ethylhexyl)phosphoric acid
*************************************************************************
C12H18N2O5S           H2L                      CAS 80459-15-0  (1595)
2-Nitroso-5-(N-propyl-3-sulfopropylamino)phenol;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      gl  KNO3   25°C 0.10M C        K1=5.94        1988YSa (81808) 584
*************************************************************************
C12H18N2O8             H2L                      CAS 93031-52-8  (5829)
1,4-Dioxa-7,10-diazacyclododecane-5,12-dione-7,10-diethanoic acid;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
```

```
------------------------------------------------------------------------------
Er+++      gl  R4N.X  25°C 0.10M C        K1=6.36        1988CCb (81834) 585
******************************************************************************
C12H18N2O8            H4L                     CAS 76079-31-7  (2587)
trans-1,2-Diaminocyclohexane-N,N'-di(propanedioic acid)
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      EMF KNO3   25°C 0.10M U        K1=14.10       1985SGa (81860) 586
------------------------------------------------------------------------------
Er+++      EMF KNO3   25°C 0.10M U        K1=15.55  B2=21.55  1980SGb (81861) 587
******************************************************************************
C12H20N2O8            H4L                     CAS 1798-13-6  (4935)
1,2-Diaminobutane-N,N,N',N'-tetraethanoic acid;
(HOOC.CH2)2N.CH2.CH(C2H5).N(CH2.COOH)2
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      vlt KNO3   20°C 0.10M U        K1=20.11       1968NLa (82023) 588
******************************************************************************
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
------------------------------------------------------------------------------
Er+++      gl  KNO3   20°C 0.10M U        K1=9.37   B2=14.73  1975DPa (82065) 589
------------------------------------------------------------------------------
Er+++      gl  KNO3   25°C 0.10M U        K1=8.99        1973GBd (82066) 590
******************************************************************************
C12H20N2O8            H4L                     CAS 61368-60-3  (3389)
1,2-Diaminoethane-N,N'-diethanoic-N,N'-di-2-propanoic acid;
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      vlt KNO3   20°C 0.10M U        K1=18.51       1976NKa (82130) 591
******************************************************************************
C12H20N2O8            H4L                     CAS 40623-42-5  (3388)
1,2-Diaminoethane-N,N'-diethanoic-N,N'-dipropanoic acid;
------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
------------------------------------------------------------------------------
Er+++      gl  NaClO4 25°C 0.10M U  IH    K1=14.13       1988RNa (82162) 592
                                         B(Er+HL)=6.46
DH(K1)=3.40 kJ mol-1, DH(Er+HL)=30.1, DS(K1)=282 J K-1 mol-1
******************************************************************************
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
------------------------------------------------------------------------------
```

Er+++ gl NaClO4 25°C 0.50M M H K1=10.94 1985CBa (82216) 593
K(ErL+H)=6.20
K(ErHL+H)=4.98
DH(K1)=28.0 kJ mol-1, DS=303 J K-1 mol-1 (by calorimetry)

****

C12H20N2O8 H4L BDTA CAS 868-43-9 (1742)
DL-2,3-Diaminobutane-N,N,N',N'-tetraethanoic acid;
(HOOC.CH2)2N.CH(CH3).CH(CH3).N(CH2.COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	NaClO4	20°C	0.10M	U		K1=20.30	1971ISa (82293)	594
Er+++	vlt	oth/un	20°C	0.10M	U		K1=20.68	1966DMa (82294)	595
Er+++	vlt	KNO3	20°C	0.10M	U		K1=20.68	1966NSb (82295)	596

****

C12H20N2O8 H4L CAS 22968-57-6 (3992)
meso-2,3-Diaminobutane-N,N,N',N'-tetraethanoic acid;
(HOOC.CH2)2N.CH(CH3).CH(CH3).N(CH2.COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	NaClO4	20°C	0.10M	U		K1=17.59	1971ISa (82390)	597
Er+++	vlt	oth/un	20°C	0.10M	U		K1=17.55	1966DMa (82391)	598

****

C12H20N2O8S H4L TEDTA CAS 923-74-0 (3394)
2,2'-Thiobis(ethyliminodiethanoic acid); S(CH2.CH2.N(CH2.COOH)2)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	C		K1=14.51	1985TPa (82451)	599

****

C12H20N2O9 H4L EEDTA CAS 923-73-9 (2112)
Oxa-bis(ethyleneimino)diethanoic acid; ((HOOC.CH2)2N.CH2.CH2)2O

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	EMF	KNO3	20°C	0.10M	U		K1=17.99	1962MMc (82528)	600

****

C12H20N2O10 H4L CAS 10258-50-1 (3993)
(2,3-Dihydroxytetramethylenedinitrilo)tetraethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	EMF	KCl	25°C	0.10M	U		K(Er+H2L)=13.6 K(Er+HL)=18.34	1967SSa (82586)	601

****

C12H20O8N2 H4L (6908)
2-Methyl-1,2-diaminopropane-N,N,N'N'-tetraethanoic acid;
(HOOC.CH2)2N.CH2.C(CH3)2.N(CH2.COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	vlt	KNO3	20°C	0.10M	C		K1=17.46	1978NLa (82672)	602

****
C12H21NO6 H3L (7209)
1-Carboxy-1-aminoheptane-N,N-diethanoic acid; HOOC.CH(C6H13)N(CH2.COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	alc/w	20°C	40%	U		K1=11.65	1985LBc (82695)	603

Medium: 40% v/v MeOH/H2O, 0.1 M KNO3
****
C12H21N3O6 H3L NOTA (5589)
1,4,7-Triazacyclononane-N,N',N"-triethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	NaCl	25°C	0.10M	C			1990BSe (82731)	604
							K(Er+HL)=3.8		

****
C12H24N4O4 H2L (7343)
1,4,7,10-Tetraazacyclododecane-1,7-bis(ethanoic acid);

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	R4N.X	25°C	0.10M	C		K1=13.31	1998CCb (83081)	605

****
C12H24O6 L 18-Crown-6 CAS 17455-13-9 (577)
1,4,7,10,13,16-Hexaoxacyclooctadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	non-aq	25°C	100%	C		K1=1.75	2003ZRa (83347)	606

Medium: DMSO. Method: competition with murexide.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	dis	R4N.X	25°C	0.12M	C		K1=<0.2	1998SUa (83348)	607

Medium: 0.12 M Et4NBr.
Method:solvent extraction into cyclohexane/di(2-ethylhexyl)phosphoric acid

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	ISE	non-aq	25°C	100%	C		K1=7.67	1983ANb (83349)	608

The equilibration took 7-12 days. Medium: PC, 0.10 M Et4NClO4
****
C12H26N2O4 L Cryptand 2,2 CAS 23978-55-4 (925)
4,7,13,16-Tetraoxa-1,10-diazacyclooctadecane;

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

---
Er+++ ISE non-aq 25°C 100% C T H K1=16.9 1986ALa (83833) 609
Medium: propylene carbonate, 0.1 M Et4NClO4. DH and DS given

Er+++ gl alc/w 25°C 100% C I K1=8.70 1983ANb (83834) 610
The equilibration took 7-12 days. Medium: MeOH, 0.05 M Et4NClO4
In propylene carbonate, 0.1 M Et4NClO4, K1=14.8
****
C12H26O6 L Pentaglyme CAS 1191-87-3 (2498)
2,5,8,11,14,17-Hexaoxaoctadecane; (CH3.O.CH2.CH2.O.CH2.CH2.O.CH2.)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl non-aq 25°C 100% C K1=4.63 1989BPa (83998) 611
Medium: anhydrous propylene carbonate, 0.1 M Et4NClO4
****
C12H28N2O9P2 H4L (7242)
1,4,10-Trioxa-7,13-diazacyclopentadecane-7,13-diyldimethylenediphosphonic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl R4N.X 25°C 0.10M U K1=13.31 1996BJa (84154) 612
K(Er+HL)=9.91
K(Er+H2L)=5.60
Medium: 0.1 M Me4NCl
****
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
---
Er+++ gl NaCl 20°C 0.10M C K1=10.0 1988SJb (84326) 613
****
C13H5O2F13S L (6997)
1-(2-Thienyl)-3-tridecafluorohexylpropane-1,3-dione; C6F13.CO.CH2.CO.C4H3S

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl alc/w 22°C 80% U K1=5.71 B2=11.20 1995MTa (84452) 614
K3=4.37
Medium: 0.1 M NaClO4 in 80% (v/v) EtOH/H2O.
****
C13H11NOS H2L (7306)
2-(Salicylideneamino)thiophenol, Salicylaldehyde-2-mercaptoanil;
HO.C6H4.CH:N.C6H4.SH

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl alc/w 25°C 70% U K1=12.05 B2=22.44 1995IFa (85042) 615
Medium: 70% v/v EtOH/H2O, 0.10 M NaCl.

****

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
Er+++	dis	KCl	RT	0.10M	C			1996KNa	(85143)	616

Method: extraction into benzene from 0.10 M KCl (pH 7.0; borate buffer).
K(Er+3HL(org)=ErL3(org)+3H)=-16.38

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	mixed	25°C	75%	U		K1=8.75 K3=5.90	B2=15.45	1969DSb (85144)	617

Medium: 75% dioxan, 0.1 M NaClO4

****

C13H11NS HL CAS 42152-36-3 (8401)
2-[(Phenylmethylene)amino]benzenethiol;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	alc/w	25°C	70%	U		K1=8.01	B2=14.85	1995IFa (85227)	618

Medium: 70% v/v EtOH/H2O, 0.10 M NaCl. Also data for p-Cl, p-NMe2, p-OH,
p-OCH3, p-CH3, p-NO2 substituted benzaldehyde Schiff bases.

****

C13H11N2O3F3 HL (5563)
3-(2-Acetylphenylhydrazone)-1,1,1-trifluoropentane-2,4-dione;
CF3.CO.C(CO.CH3):N.HN.C6H4.COCH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	diox/w	30°C	75%	U		K1=8.96	B2=16.54	1988ESb (85243)	619

****

C13H12N2O3S HL (6203)
Salicylidenesulfanilamide, 4-(N-(2-Hydroxybenzylene))aminosulanilamide;
H2NSO2C6H4N:CHC6H4OH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	oth/un	25°C	0.10M	U		K1=12.598		1987KSc (85357)	620

****

C13H12N4O L Diphenylcarbaz. CAS 538-62-5 (1195)
Diphenylcarbazone; C6H5.NH.NH.CO.N:N.C6H5

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	EMF	alc/w	20°C	50%	U		K1=3.80		1971MAc (85409)	621

Medium: 50% EtOH, 0.1 M NaClO4

****

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
-------------------------------------------------------------------------
Er+++      EMF alc/w  20°C  50%  U        K1=2.20        1971MAc (85455) 622
Medium: 50% EtOH, 0.1 M NaClO4
*************************************************************************
C13H14N2O3             HL                        (4940)
3-(2-Acetylphenylhydrazone)pentane-2,4-dione;(CH3.CO)2C:N.NH.C6H4(CO.CH3)
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      gl  diox/w 30°C  75%  U        K1=11.58  B2=21.88  1988ESb (85606) 623
*************************************************************************
C13H15NO6              H3L                       (4999)
2-Benzylnitrilotriethanoic acid;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      oth oth/un 25°C 0.10M U        K1=11.8   B2=20.96  1962HKa (85736) 624
*************************************************************************
C13H20N2O8             H4L                     CAS 123064-92-6  (7929)
trans-1,3-Cyclopentanediaminotetraethanoic acid;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      gl  KCl    25°C  1.0M U        K1=14.33       1989CMb (86119) 625
                                        K(ErHL+H)=3.29
                                        K(ErL+H)=3.70
*************************************************************************
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
-------------------------------------------------------------------------
Er+++      gl  KNO3   25°C 0.10M C        K1=11.03       1982PPd (86192) 626
                                        K(Er+HL)=7.14
*************************************************************************
C13H22N2O8             H4L                     CAS 1198-14-7  (5004)
1,2-Diaminopentane-N,N,N',N'-tetraethanoic acid; (HOOCCH2)2NCH2CH(C3H7)N(CH2COOH)2
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      vlt KNO3   20°C 0.10M U        K1=20.09       1974NLa (86225) 627
*************************************************************************
C13H22N2O8             H4L                       (7164)
2,4-Diaminopentane-N,N,N',N'-tetraethanoic acid;
(HOOCCH2)2NCH(CH3)CH2CH(CH3)N(CH2COOH)2
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      vlt KNO3   20°C 0.10M U        K1=13.48       1981NSc (86252) 628
```

****

C13H22N2O8 H4L (5003)
3-Methyl-1,2-diaminobutane-N,N,N',N'-tetraethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	vlt	KNO3	20°C	0.10M	U		K1=19.97	1968NLb (86280)	629

****

C13H22N2O9 H4L DETAP CAS 36829-96-6 (5602)
Bis(2-aminoethyl)ether-N,N,N'-triethanoic acid-N'-(3-propanoic acid);

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	C		K1=14.90 K(Er+HL)=9.24	1985PLa (86301)	630

****

C14H8O4 H2L Alizarin CAS 72-48-0 (1058)
1,2-Dihyhroxyanthraquinone;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	oth/un	25°C	0.10M	U		K1=12.60	1981EIa (86640)	631

****

C14H8O7S H3L DASA CAS 83-61-4 (950)
1,2-Dihydroxyanthraquinone-3-sulfonic acid, Alizarin Red S;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	mixed	?	50%	U		K1eff=7.87 B3eff=17.90	1973KTb (86726)	632

Medium: 50% v/v acetone. Borax buffers.

****

C14H9N5Cl2 L CAS 7071-45-6 (8463)
1,5-Bis(4-chlorophenyl)-3-cyanoformazan;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	diox/w	25°C	70%	U		K1=7.72 B2=14.10	1996DAb (86848)	633

Medium: 70% dioxane/H2O, 0.10 M NaClO4.

****

C14H12N2O3 H2L CAS 4870-46-6 (3432)
2-Hydroxy-5-methyl-2'-carboxy-azobenzene; HO.C6H3(CH3).N:N.C6H4.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	diox/w	25°C	50%	U	I	K1=3.72 B2=7.36	1985ANa (87213)	634

****

C14H15N2O3Cl H2L (8285)
5,5'-Dimethylcyclohexane-2-(2'-hydroxy-4'-chlorophenyl)hydrazono-1,3-dione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl mixed 30°C 0.10M U T H K1=12.44 B2=22.82 1988TRb (87717) 635
Medium: 0.1 M KNO3 in 75% v/v isopropanol/water
****
C14H16N2O2S HL CAS 189231-67-2 (8475)
2-Thiophenylhydrazodimedone;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl diox/w 25°C 75% C T H K1=13.65 B2=25.62 1997EIa (87866) 636
Medium: 75% v/v dioxane/H2O, 0.10 M KNO3. Data for 10-40 C. DH(K1)=-8.26
kJ mol-1, DS(K1)=-12.85 J K-1 mol-1; DH(K2)=-7.16, DS(K2)=-11.00.
****
C14H16N2O3 H2L (8284)
5,5'-Dimethylcyclohexane-2-(2'-hydroxyphenyl)hydrazono-1,3-dione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl mixed 30°C 0.10M U T H K1=12.71 B2=23.37 1988TRb (87884) 637
Medium: 0.1 M KNO3 in 75% v/v isopropanol/water
****
C14H16N2O8 H4L CAS 40774-59-2 (1901)
1,2-Diaminobenzene-N,N,N',N'-tetraethanoic acid; C6H4(N(CH2.COOH)2)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl NaClO4 25°C 1.00M C H K1=15.55 1992YNa (87948) 638
By calorimetry: DH(K1)=8.4 kJ mol-1, DS=326 J K-1 mol-1
****
C14H19NO7 HL (6775)
16-Nitro-3,6,9,12-tetraoxabicyclo[12.3.1]octadeca-1(18),14,16-trien-18-ol;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl R4N.X 25°C 0.10M C K1=3.11 1990CBe (88146) 639
****
C14H20O5 L Benzo15-crown-5 CAS 14098-44-3 (608)
2,3-Benzo-1,4,7,10,13-pentaoxacyclopentadeca-2-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ ISE R4N.X 25°C 0.10M C K1=2.40 1986XJa (88266) 640
****
C14H20O8S HL CAS 127461-53-4 (7818)
2,3-Benzo-1,4,7,10,13-pentaoxacyclopentadeca-2-ene-4'-sulfonic acid;

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

Er+++ dis R4N.X 25°C 0.12M C K1=1.00 1998SUa (88391) 641
Medium: 0.12 M Et4NBr.
Method:solvent extraction into cyclohexane/di(2-ethylhexyl)phosphoric acid
****
C14H22N2O8 H4L cis-1,3-CDTA CAS 92681-23-7 (2847)
cis-1,3-Diaminocyclohexane-N,N,N',N'-tetraethanoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KCl 25°C 1.0M U K1=8.21 1987CMe (88440) 642
K(ErHL+H)=5.05
K(ErL+H)=7.10
****
C14H22N2O8 H4L cis-1,4-CDTA CAS 92681-25-9 (2848)
cis-1,4-Diaminocyclohexane-N,N,N',N'-tetraethanoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KCl 25°C 1.0M U K1=9.43 1987CMe (88455) 643
K(ErHL+H)=5.63
K(ErL+H)=6.09
****
C14H22N2O8 H4L CDTA CAS 482-54-2 (200)
trans-1,2-Diaminocyclohexane-N,N,N',N'-tetraethanoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KCl 25°C 1.0M U K1=20.63 1987CMe (88627) 644
K(ErL+H)=1.24

Er+++ gl KCl 25°C 1.00M U K1=20.63 1984MFa (88628) 645

Er+++ gl NaClO4 25°C 0.50M U K1=19.38 1977GGb (88629) 646

Er+++ EMF KNO3 25°C 0.10M U T H K1=20.20 1962MHa (88630) 647
DH(K1)=0.4 kJ mol-1, DS=289 J K-1 mol-1. At 20 C: K(ErL+H)=2.43

Er+++ vlt KNO3 20°C 0.10M U K1=20.68 1954SGa (88631) 648
****
C14H22N2O8 H4L trans-1,3-CDTA CAS 92681-24-8 (2849)
trans-1,3-Diaminocyclohexane-N,N,N',N'-tetraethanoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KCl 25°C 1.0M U K1=9.43 1987CMe (88835) 649
K(ErHL+H)=4.51
K(ErL+H)=7.04
****
C14H22N2O8 H4L trans-1,4-CDTA CAS 92681-26-0 (2843)
trans-1,4-Diaminocyclohexane-N,N,N',N'-tetraethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KCl	25°C	1.0M	U		K1=9.46 K(ErHL+H)=5.62 K(ErL+H)=5.86	1987CMe (88853)	650
Er+++	gl	KCl	25°C	1.00M	U		K1=9.46	1984MFb (88854)	651

C14H22N2O9 H2L CAS 93031-53-9 (5830)
1,4,7-Trioxa-10,13-diazacyclopentadecane-8,15-dione-10,13-diethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	R4N.X	25°C	0.10M	C		K1=8.08	1988CCb (88878)	652

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
Er+++	cal	KNO3	25°C	0.10M	C	T		1988MIa (89210)	653
DH(K1)=-28.45 kJ mol-1, DS=339.9 J mol-1 K-1. Also data for 283 and 313 K									
Er+++	cal	NaClO4	25°C	0.50M	U	H		1977CGc (89211)	654
DH(K1)=-41.3 kJ mol-1									
Er+++	gl	NaClO4	25°C	0.50M	U		K1=21.08	1977GGb (89212)	655
Er+++	cal	KNO3	27°C	0.10M	U	H		1968CLd (89213)	656
DH(K1)=-30.9 kJ mol-1, DS=332 J K-1 mol-1									
Er+++	EMF	KNO3	25°C	0.10M	U	H	K1=22.74	1962MTc (89214)	657
DH(K1)=-30.5 kJ mol-1, DS=333 J K-1 mol-1									
Er+++	gl	oth/un	25°C	0.10M	U		K1=23.18	1959HCa (89215)	658

C14H24N2O8 H4L (5075)
1,2-Diaminoethane-N,N'-diethanoic-N,N'-di-2-butyric acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	vlt	KNO3	20°C	0.10M	U		K1=18.19	1969NDc (89507)	659

C14H24N2O8 H4L (7165)
1,2-Diaminohexane-N,N,N',N'-tetraethanoic acid; (HOOCCH2)NCH2CH(C4H9)N(CH2COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	vlt	KNO3	20°C	0.10M	U		K1=19.87	1974NLa (89528)	660

****

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
Er+++	gl	KCl	25°C	1.00M	U	M	1976BKa (89570)	661	
							K(ErEDTA+L)=3.0		
							K(ErEDTA+HL)=2.6		
							K(ErEDTA+L)=5.7		
Er+++	gl	KCl	25°C	0.10M	U		1974KPd (89571)	662	
							K(Er+HL)=7.07		

****

C14H24N2O8 H4L CAS 1633-00-7 (5076)
4-Methyl-1,2-diaminopentane-N,N,N',N'-tetraethanoic acid;
(HOOCCH2)2NCH2CH(N(CH2COOH)2CH2CH(CH3)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	vlt	KNO3	20°C	0.10M	U		K1=19.99	1968NLb (89631)	663

****

C14H24N2O8 H2L CAS 17619-53-3 (5833)
Diaminoethane-N,N'-Di(ethylaceto)-N,N'-diethanoic acid;
(-CH2.N(CH2.COOH)CH2.COOC2H5)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	R4N.X	25°C	0.10M	C		K1=10.21	1988CCb (89649)	664

****

C14H24N2O8 H4L EDTP (2936)
Diaminoethane-N,N,N',N'-tetrapropanoic acid; (HOOC.CH2CH2)2N.CH2CH2.N(CH2CH2.COOH)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaClO4	25°C	0.10M	U		1995HAa (89679)	665	
							K(Er+HL)=4.60		
							K(Er+H2L)=3.62		
							K(Er+H3L)=2.66		
							B(EoHL)=14.03		
							B(ErH2L)=19.17, B(ErH3L)=22.38		

****

C14H24N2O9 H4L BPETA CAS 87720-52-3 (5077)
Bis-(3-di(carboxymethyl)aminopropyl)ether;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	U		K1=11.87	1984TPa (89727)	666
							K(Er+HL)=7.85		

****

C14H24N2O10 EGTA CAS 67-42-5 (349)
Ethyleneglycol-O,O'-bis(2-aminoethyl ether)-N,N,N',N'-tetraethanoic acid; H4L

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	alc/w	25°C	20%	M	TI	K1=17.093	2000KDa (89856)	667

Medium: 20% v/v EtOH/H2O, 0.10 M NaNO3. Data for 0.05 and 0.15 M NaNO3.
At I=0, K1=17.291. Data for 35 and 45 C and I=0.10 M NaNO3.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KCl	25°C	1.0M	U	M	K2=1.58 K(ErL+ida)=1.2	1985KBb (89857)	668
Er+++	EMF	KNO3	20°C	0.10M	U		K1=17.40	1962MMc (89858)	669

****

C14H25N3O8 H4L DEATA CAS 97315-55-4 (5601)
N,N-Bis(2-aminoethyl)ethylamine-N',N',N",N"-tetraethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	C		K1=17.70	1985TPa (90098)	670

****

C14H25N3O9 H4L CAS 4454-15-3 (5078)
((N-(2-Hydroxyethyl)-2,2'-iminodiethylene)dinitrilo)tetraethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	vlt	KCl	?	0.10M	U		K1=13.87	1968VLa (90114)	671

****

C14H26N2O7 H2L (1567)
1,4,10-Trioxa-7,13-diazacyclopentadecane-N,N'-diethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	cal	R4N.X	25°C	0.10M	U	H		1995MMb (90182)	672

Medium: NMe4NO3. DH(K1)=-15.4 kJ mol-1, DS=265 J K-1 mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	R4N.X	25°C	0.10M	M		K1=11.15	1986COb (90183)	673

****

C14H28N2O4 L Cryptand 2,1,1 CAS 31250-06-3 (836)
1,10-Diaza-4,7,13,18-tetraoxabicyclo[8,5,5]eicosane (2,1,1);

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	ISE	non-aq	25°C	100%	C	T H	K1=15.5	1986ALa (90361)	674

Medium: propylene carbonate, 0.1 M Et4NClO4

****

C14H28N2O6 HL CAS 82353-42-2 (5850)
1,4,10,13-Tetraoxa-7,16-diazacyclooctadecane-7-ethanoic acid;

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

```
-------------------------------------------------------------------------------
Er+++      gl  R4N.X  25°C 0.10M C        K1=6.70        1988CCc (90478) 675
*******************************************************************************
C14H28O7                L    21-Crown-7       CAS 33089-36-0  (2264)
1,4,7,10,13,16,19-Heptaoxacycloheneicosane;
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Er+++      gl  non-aq 25°C 100%  C        K1=6.10        1989BPa (90519) 676
Medium: anhydrous propylene carbonate, 0.1 M Et4NClO4
*******************************************************************************
C14H30O7                L                     CAS 1072-40-8  (2499)
2,5,8,11,14,17,20-Heptaoxaheneicosane; CH3.O.(CH2.CH2.O)6.CH3
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Er+++      gl  non-aq 25°C 100%  C        K1=5.31        1989BPa (90691) 677
Medium: anhydrous propylene carbonate, 0.1 M Et4NClO4
*******************************************************************************
C14H32N2O10P2         H4L                     CAS 81963-60-2  (7240)
1,4,10,13-Tetraoxa-7,16-diazacyclooctadecane-7,16-diyldimethylenediphosphonic acid;
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Er+++      gl  R4N.X  25°C 0.10M U        K1=12.81       1996BJa (90762) 678
                                        K(Er+HL)=9.74
                                        K(Er+H2L)=5.66
Medium: 0.1 M Me4NCl
*******************************************************************************
C14H34N4O6P2          H4L                     CAS 200952-02-9  (7644)
1,4,7,10-Tetraazacyclododecane-1,7-bis(methanephosphonic acid monoethyl ester);
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Er+++      gl  KCl    25°C 0.10M C        K1=9.68        1998BRa (90841) 679
*******************************************************************************
C15H11N3O              HL    PAN              CAS 85-85-8  (572)
1-(2-Pyridylazo)-2-naphthol; C5H4N.N:N.C10H6.OH
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Er+++      sp  alc/w  21°C  50%  U  I     K1=9.51        1981MCb (91211) 680
Medium: 50% MeOH, 0.1 M NaClO4. In 75% MeOH K1=11.15
*******************************************************************************
C15H13NO2              HL                      CAS 959-66-0  (245)
Benzoyl-acetanilide; C6H5.CO.CH2.CO.NH.C6H5
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
Er+++      gl  alc/w  30°C  70%  M        K1=5.95        1978SAb (91627) 681
```

****

C15H14NOCl HL CAS 268214-29-5 (8398)
4-Chloro-3,5-dimethyl-2-[(phenylimino)methyl]phenol;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	diox/w	30°C	75%	M		K1=7.34		2000ANa (91689)	682

Medium: 75% v/v dioxan/H2O, 0.10 M NaClO4. Data for an extensive series of 4'-substituted phenylimino derivatives.

****

C15H18N2O3 HL CAS 116822-13-0 (6743)
5,5-Dimethylcyclohexane-2-(2-hydroxy-4'-methylphenyl)-hydrazono-1,3-dione;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	alc/w	20°C	75%	U	T H	K1=11.72	B2=19.92	1993RAa (92019)	683

Medium: 75% v/v MeOH/H2O; 0.10 M KNO3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	mixed	30°C	0.10M	U	T H	K1=12.85	B2=23.96	1988TRb (92020)	684

Medium: 0.1 M KNO3 in 75% v/v isopropanol/water

****

C15H20N2O6 H3L BEDTA CAS 65311-06-0 (2944)
N-Benzyldiaminoethane-N,N',N'-triethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	C		K1=13.47	1978MPb (92149)	685

****

C15H23N3O2 L CAS 36763-33-4 (5176)
N,N,N',N'-Tetraethyl-2,6-pyridinedicarboxamide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	sp	non-aq	25°C	100%	M		K1=7.7	B2=14.40 B3=22.7	1997RPb (92281)	686

Medium: acetonitrile.

****

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
Er+++	EMF	KCl	?	0.10M	U		K1=16.46	1966VLa (92368)	687

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	vlt	oth/un	?	?	U		K1=16.49	1966VLa (92369)	688

****

C15H25N3O10 H5L (6100)
Diethylenetriamine-N,N,N',N"-tetraethanoic acid-N"-propanoic acid;

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

---
Er+++ gl KNO3 25°C 0.10M C K1=19.34 1989SPa (92391) 689
K(Er+HL)=13.28
****
C15H26N4O9 H4L (7685)
Diethylenetriamine-N,N,N',N",N"-pentaethanoic acid N'-methylamide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KCl 25°C 0.10M C K1=20.2 2000SBb (92429) 690
****
C15H26N4O9 H4L CAS 137076-43-8 (5085)
Diethylenetriamine-N,N,N',N",N"-pentaethanoic acid N-methylamide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KCl 25°C 0.10M C K1=19.3 2000SBb (92444) 691
****
C15H33NO6 L CAS 70384-51-9 (838)
Tris(3,6-dioxaheptyl)amine; (CH3.CH2.O.CH2.CH2.O.CH2.)3N

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ ISE non-aq 25°C 100% C T H K1=9.7 B2=17.7 1986ALa (92564) 692
Medium: propylene carbonate, 0.1 M Et4NClO4. DH, DS given.
****
C16H9N2OBr3 HL CAS 84317-74-8 (5169)
1-(2,4,6-Tribromophenylazo)-2-hydroxynaphthalene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ kin oth/un 25°C 0.02M U K1=5.40 1972GSe (92650) 693
****
C16H11N5O4 H2L (5153)
1,5-Bis(2-carboxyphenyl)-3-cyanoformazan;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl diox/w 25°C 70% U I K1=12.27 B2=21.39 1996DAb (92894) 694
Medium: 70% dioxane/H2O, 0.10 M NaClO4. In 50% EtOH/H2O, 0.10 M NaClO4,
K1=11.03, K2=9.32.
****
C16H12N5O3 L CAS 77251-11-7 (5928)
1-Phenyl-3-methyl-4(2'-nitrophenylhydrazo)-5-pyrazolone;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl diox/w 30°C 75% M K1=7.64 1987ESa (93127) 695
****
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
Er+++	gl	NaClO4	30°C	0.10M	U		K(Er+H2L=ErH2L)=5.98 K(ErHL+H)=6.85 K(ErL+H)=8.94 K(ErL+OH)=3.05	1976NDa (93189)	696

****

C16H13N2O11AsS2 H6L Arsenazo I CAS 520-10-5 (277)
2-(2'-Arsonophenylazo)chromotropic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	oth/un	20°C	0.10M	U		K(Er+H2L)=8.28	1971SSd (93252)	697

****

C16H15N5 L CAS 7014-14-4 (8462)
1,5-Bis(4-methylphenyl)-3-cyanoformazan;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	diox/w	25°C	70%	U		K1=8.58 B2=16.30	1996DAb (93638)	698

Medium: 70% dioxane/H2O, 0.10 M NaClO4.

****

C16H18N2O3 HL (5564)
2-(2-Acetylphenylhydrazone)-5,5-dimethyl-1,3-cyclohexanedione;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	diox/w	30°C	75%	U		K1=10.45 B2=19.50	1988ESb (93775)	699

****

C16H18N4O4 H2L CAS 161563-39-9 (8399)
1,3-Phenylenediamine bisazoacetylacetone;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	diox/w	25°C	50%	U		K1=8.11 B2=15.31	1997MAb (93858)	700

Medium: 50% v/v dioxan/H2O, 0.10 M NaClO4. For the 1,4-phenylenediamine derivative, K1=8.72, K2=8.20.

****

C16H18N4O4 H2L CAS 161563-40-2 (8400)
1,3-Phenylenediamine bisazobenzoylacetone;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	diox/w	25°C	50%	U		K1=6.50 B2=11.61	1997MAb (93865)	701

Medium: 50% v/v dioxan/H2O, 0.10 M NaClO4. For the 1,4-phenylenediamine derivative, K1=7.65, K2=6.30.

****
C16H20N2O8 H4L CAS 6411-02-5 (1919)
1-Phenyl-ethylenediamine-N,N,N',N'-tetraethanoic acid (DL)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	vlt	KNO3	20°C	0.10M	U		K1=19.01	1969NDb (94036)	702

****
C16H23NO8 HL (6776)
19-Nitro-3,6,9,12,15-pentaoxabicyclo[15.13.1]heneicosa-1(21),17,19-trien-21-ol;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	R4N.X	25°C	0.10M	C		K1=2.79	1990CBe (94257)	703

****
C16H23NO8 L CAS 53408-96-1 (1765)
2,3-(4'-Nitrobenzo)-1,4,7,10,13,16-hexaoxacyclooctadeca-2-ene;
4'-Nitrobenzo-18-crown-6

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	ISE	R4N.X	25°C	0.10M	C		K1=3.40	1986XJa (94265)	704

****
C16H24O9S HL SB18C6 CAS 185099-14-3 (7819)
2,3-Benzo-1,4,10,13,16-hexaoxacyclooctadeca-2-ene-4'-sulfonic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	dis	R4N.X	25°C	0.12M	C		K1=0.71	1998SUa (94476)	705

Medium: 0.12 M Et4NBr.
Method:solvent extraction into cyclohexane/di(2-ethylhexyl)phosphoric acid
****
C16H26N2O10 H2L CAS 93031-54-0 (5831)
1,4,7,10-Tetraoxa-13,16-diazacyclooctadecane-11,18-dione-13,16-diethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	R4N.X	25°C	0.10M	C		K1=8.78	1988CCb (94567)	706

****
C16H27N5O8 H3L (6621)
1,4,7-Tris(carboxymethyl)-1,4,7,10,13-pentaazacyclopentadecan-9,14-dione;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	KCl	25°C	0.08M	U		K1=11.2	1994FCa (94666)	707

****
C16H27N5O8 H3L (6915)
4,10,13-Tris(carboxymethyl)-1,4,7,10,13-pentaazacyclopentadeca-8,15-dione;

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

---
Er+++ sp KCl 25°C 0.08M U K1=14.8 1994FCa (94682) 708
****
C16H28N2O8 H4L (5167)
1,2-Diaminoethane-N,N'-diethanoic-N,N'-di-2-(3-methyl)butanoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl KNO3 20°C 0.10M U K1=14.91 1969NDc (94709) 709
By polarography: K1=14.99
****
C16H28N2O8 H4L (5168)
1,2-Diaminoethane-N,N'-diethanoic-N,N'-di-2-pentanoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ vlt KNO3 20°C 0.10M U K1=18.16 1969NDc (94735) 710
****
C16H28N2O8 H4L (5138)
1,2-Diaminooctane-N,N,N',N'-tetraethanoic acid;
(HOOCCH2)2N.CH2.CH(C6H13)N(CH2COOH)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ vlt KNO3 20°C 0.10M U K1=19.83 1979MBd (94761) 711
****
C16H28N4O8 H4L DOTA CAS 60239-18-1 (1017)
1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraethanoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl NaCl 37°C 1.0M C K1=23.5 1994TBb (94888) 712
Method: Competitive reaction with Eu3+ ion.
****
C16H30N2O8 H2L CAS 72912-01-7 (1568)
1,4,10,13-Tetraoxa-7,16-diazacyclooctadecane-N,N'-diethanoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ cal R4N.X 25°C 0.10M U H 1995MMb (95033) 713
Medium: NMe4NO3. DH(K1)=-3.05 kJ mol-1, DS=226 J K-1 mol-1.

Er+++ gl R4N.X 25°C 0.10M U K1=11.30 1983CRb (95034) 714
****
C16H32N2O5 L Cryptand 2,2,1 CAS 31364-42-8 (837)
1,10-Diaza-4,7,13,16,21-pentaoxabicyclo[8,8,5]tricosane (2,2,1);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ ISE non-aq 30°C 100% C T H K1=18.9 1986ALa (95199) 715

Medium: propylene carbonate, 0.1 M Et4NClO4

Er+++	gl	R4N.X	25°C	0.25M	C	K1=6.60	1981BBe (95200) 716

Medium: Me4NCl

****

C17H13N4O3 HL (5927)

1-Phenyl-3-methyl-4-(2'-carboxyphenylhydrazo)-5-pyrazolone;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	diox/w	30°C	75%	M		K1=16.03 B2=28.32	1987ESa (95764)	717

****

C17H14N2O2 L CAS 4551-69-3 (698)

4-Benzoyl-3-methyl-1-phenyl-2-pyrazolin-5-one;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaNO3	20°C	0.10M	U	M		1981GCa (95878)	718
							B(Er+3L+2TBP)=24.29		
							B(Er+3L+TBPoxide)=23.2		
							B(Er+3L+4TBPoxide)=34.0		
Er+++	dis	non-aq	25°C	100%	U	M		1973TEc (95879)	719
							K(ErA+3L)=2.29		
							K(ErB2+3L)=7.56		
							K(Er(phen)2+3L)=8.26		

Medium: CHC13. A=tributyl phosphate, B=piperidine

****

C17H15N4O2 L CAS 97671-53-9 (5926)

1-Phenyl-3-methyl-4-(2'-methoxyphenylhydrazo)-5-pyrazolone;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	diox/w	30°C	75%	M		K1=8.39 B2=16.49	1987ESa (96005)	720

****

C17H16N2O3S2 L CAS 127335-83-5 (6849)

Sulfafurazole thiophene-2-aldehyde Schiff base; C4H3S.CH:N.C6H4.SO2.NH.C4HO(CH3)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	oth/un	25°C	0.10M	U	T	K1=5.58	1990TSa (96037)	721

30 C: K=5.36, 35 C: K=5.16

****

C17H20N3O3F HL (7845)

1-Ethyl-6-fluoro-7-(4-methylpyperazine-1-yl)-4-oxo-1,4-dihydroquinoline-3-carboxylic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	alc/w	22°C	0.1M	U		K1=5.57 B2=10.02	2000TBb (96283)	722

Medium: 0.1 M NaClO4 in 70% v/v EtOH/H2O

****

C17H23N4O4BrS H2L (1594)
2-(5-Bromo-2-pyridylazo)-5-(N-propyl-3-sulfopropylamino)phenol;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	sp	NaNO3	25°C	0.10M	C		K1=8.58		1988OHa (96417)	723
							K(Er+HL)=2.80			

****

C17H27NO4 L CAS 71089-11-7 (7945)
13-Phenylmethyl-1,4,7,10-tetraoxa-13-azacyclopentadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	cal	non-aq	25°C	100%	C	H			1993LLb (96531)	724
							K(ErNO3+L)=2.47			

Medium: acetonitrile. DH(ErNO3+L)=-120.83 kJ mol-1.

****

C17H29N3O10 H4L CAS 89378-46-1 (5528)
(Bis(3-(bis(carboxymethyl)amino)propyl)methylammonio)ethanoate;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	U		K1=9.54		1984TPa (96569)	725
							K(Er+HL)=6.20			

****

C18H16N2O3 HL (5560)
2-(2-Acetylphenylhydrazone)-1-phenyl-but-1,3-dione;
C6H5.CO.C(CO.CH3):N.NH.C6H4.COCH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	gl	diox/w	30°C	75%	U		K1=10.80	B2=20.30	1988ESb (97168)	726

****

C18H18N4 L CAS 16858-01-8 (1528)
Tris(2-pyridylmethyl)amine; (C5H4NCH2)3N

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
Er+++	nmr	KCl	25°C	1.0M	C	H	K1=1.86		2004BRa (97257)	727

Method: 1H nmr measurements in D2O. DH(K1)=-3 kJ mol-1,
DS(K1)=23 J mol-1K-1

****

C18H20N2O6 H4L EHPG CAS 10328-28-6 (429)
N,N'-Ethylene-bis-(2-(2'-hydroxyphenyl))glycine; (HOOCCH(C6H4OH)NHCH2.)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	EMF	KNO3	25°C	0.10M	C	T H	K1=20.97	1985HWb (97423)	728

K(ErL+H)=7.00
Method: Hg (and glass) electrode, using Hg(II) as competitive indicator ion. Data for 10-35 C. DH(K1)=-75.2 kJ mol-1, DS(K1)=149 J K-1 mol-1.

****

C18H25N3O8 H4L BEATA CAS 87732-99-8 (5600)
N,N-Bis(2-aminoethyl)aniline-N',N',N'',N''-tetraethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KNO3	25°C	0.10M	C		K1=14.81	1985TPa (97651)	729

****

C18H28O5 L CAS 15196-73-3 (2359)
2,3-(4'-Dimethylethylbenzo)-1,4,7,10,13-pentaoxacyclopentadeca-2-ene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	non-aq	25°C	100%	U		K1=2.82	1982MDa (97804)	730

Medium: propylene carbonate

****

C18H30N2O11 H2L CAS 93049-99-1 (5832)
1,4,7,10,13-Pentaoxa-16,19-diazacycloeicosane-14,21-dione-16,19-diethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	R4N.X	25°C	0.10M	C		K1=9.08	1988CCb (97907)	731

****

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
Er+++	EMF	KNO3	25°C	0.10M	C T H		K1=23.35	1987HCa (98022)	732
							K(ErL+H)=4.40		
							K(ErHL+H)=2.42		

Method: Hg electrode; competitive reaction with Hg(II).
Data for 15-35 C. At 25 C, DH(K1)=95.7 kJ mol-1, DS(K1)=766 J K-1 mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	vlt	NaClO4	25°C	0.40M	C		K1=23.62	1978MNb (98023)	733

Medium: 0.40 M NaClO4, pH 4.80. Method: polarography, using Cd as indicator ion.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	EMF	KNO3	25°C	0.10M	U		K1=23.40	1970HAa (98024)	734

By ion-selective electrode: K1=23.19
By glass electrode: K(ErL+H)=4.50, B(Er2L)=3.73, K(Er2L+2OH)=13.0

****

C18H32N4O8 H4L TETA CAS 60239-22-7 (1019)
1,4,8,11-Tetraazacyclotetradecane-1,4,8,11-tetraethanoic acid;

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

Er+++ EMF NaCl 80°C 1.00M C K1=16.49 1986LDb (98197) 735
K(ErL+H)=3.50
****
C18H34N2O8 H2L CAS 68670-15-5 (5851)
1,4,10,13-Tetraoxa-7,16-diazacyclooctadecane-7,16-di-(3-propanoic acid);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl R4N.X 25°C 0.10M C K1=6.20 1988CCc (98335) 736
****
C18H36N2O6 L Cryptand 2,2,2 CAS 23978-09-8 (514)
1,10-Diaza-4,7,13,16,21,24-hexaoxabicyclo[8.8.8]hexacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ cal non-aq 25°C 100% C H K1=13.88 2003DCa (98564) 737
Method: competitive titration calorimetry of AgL+. Medium: acetonitrile.
DH(K1)=-133.6 kJ mol-1, DS(K1)=-182 J K-1 mol-1.

Er+++ ISE non-aq 30°C 100% C T H K1=16.5 1986ALa (98565) 738
Medium: propylene carbonate, 0.1 M Et4NClO4. DH and DS given

Er+++ gl alc/w 25°C 100% C I K1=10.78 1983ANb (98566) 739
The equilibration took 7-12 days. Medium: MeOH, 0.05 M Et4NClO4
****
C18H40N2O10P2 H2L (7241)
1,4,10,13-Tetraoxa-7,16-diazacyclooctadecane-7,16-diyldimethylenediphosphonic acid
bis(Et-ester);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl R4N.X 25°C 0.10M U K1=6.40 1996BJa (98890) 740
Medium: 0.1 M Me4NCl
****
C20H14N2O11S3 H5L Chromotrope 8B CAS 5850-64-6 (2674)
3-(4'-Sulfonaphthylazo)chromotropic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ sp NaClO4 25°C 0.10M C K1=6.31 1979PLb (99709) 741
****
C20H14N2O11S3 H2L Hydroxynaphthol CAS 63451-35-4 (2835)
Hydroxynaphthol blue, 1-(2-Hydroxy-4-sulfo-1-naphthylazo)-2-naphthol-3,
---
Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ sp none 25°C 0.0 U 1978BRb (99728) 742
K1eff=3.60
Keff at pH 10
****

C20H18N4O2 HL (5917)
Pyruvic monohydrazone-3-hydrazino-4-benzyl-6-phenylpyridazine;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	diox/w	30°C	75%	U			1985RSb (99830)	743
							K(Er+HL)=5.37		
							K(Er+2HL)=10.70		

****
C20H24N2O6 H4L HBED CAS 3625-89-6 (2208)
N,N'-Di-(2-hydroxybenzyl)-diaminoethane-N,N'-diethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	KNO3	20°C	0.10M	U		K1=20.15	1985SNb (99991)	744
							K(ErL+H)=5.06		
							K(ErHL+H)=4.71		

****
C20H24O6 L DiBz-18-Crown-6 CAS 14187-32-7 (604)
2,3:11,12-Dibenzo-1,4,7,10,13,16-hexaoxacyclooctadeca-2,11-diene

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	non-aq	25°C	100%	C		K1=1.49	2003ZRa (100116)	745
Medium: DMSO. Method: competition with murexide.									
Er+++	gl	oth/un	25°C	0.0	U	H	K1=2.80	1991HJa (100117)	746

****
C20H24O12S2 H2L CAS 172985-47-6 (7820)
2,3:11,12-Dibenzo-1,4,7,10,13,16-hexaoxacyclooctadeca-2,11-diene-4',4"-disulfonic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	dis	R4N.X	25°C	0.12M	C		K1=1.06	1998SUa (100279)	747
Medium: 0.12 M Et4NBr.									
Method:solvent extraction into cyclohexane/di(2-ethylhexyl)phosphoric acid									

****
C20H35N5O10 H3L (6623)
1,4,7-Tris(carboxymethyl)-13,16-dioxa-1,4,7,10,19-pentaazacycloheneicosa-9,20-dione ;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	sp	KCl	25°C	0.08M	U		K1=17.2	1994FCa (100554)	748

****
C20H36O6 L DiCy-18-crown-6 CAS 16069-36-6 (1653)
2,3:11,12-Dicyclohexyl-1,4,7,10,13,16-hexaoxacyclooctadecane;

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

---
Er+++ sp non-aq 25°C 100% C K1=1.61 2003ZRa (100645) 749
Medium: DMSO. Method: competition with murexide.
****
C21H17N2O5As H2L ArsenoBDMPH (5931)
2-Arsonodibenzoylmethanephenylhydrazone; C6H5.CO.C(CO.C6H5):N.NH.C6H4.AsO3H2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl alc/w 27°C 40% U K1=17.35 B2=22.95 1990MOc (101077) 750
Medium: 40% v/v EtOH/H2O, 0.1 M NaClO4
****
C21H17N5 L (7365)
2,6-Bis(1-methylbenzimidazol-2-yl)pyridine

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl non-aq 25°C 100% C 1997PBa (101085) 751
K3=4.7
Medium: CH3CN; 0.1 M Et4NClO4
****
C22H14O9 H5L CAS 4431-00-9 (3513)
Aurintricarboxylic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ sp oth/un 25°C ? U 1967SAa (101495) 752
K(Er+HL)=5.1(?)
****
C22H17AsN4O14S3 H6L Arsenazo M CAS 3563-69-7 (623)
2-(2-Arsonophenylazo)-7-(3-sulfophenylazo)-1,8-dihydroxynaphthalene-3,6-disulfonic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ sp oth/un ? ? U K1=15.67 1971SSi (101542) 753
****
C22H18N4O14As2S2 H8L Arsenazo III CAS 1668-00-4 (1148)
2,7-Bis(2'-arsonophenylazo)chromotropic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ sp oth/un 25°C var U I 1997HRb (101617) 754
K1(eff)=7.241
B(ErLCl)eff=5.895
B(ErL2Cl)eff=13.283
Conditional constants in chloride medium at pH 3.3. Also data in sulfate and perchlorate media. K(Er+Cl)=2.028.

Er+++ sp oth/un 20°C ? U 1972SSi (101618) 755

K(Er+H4L)=16.39
****
C22H24N2O10 H4L CAS 132796-79-3 (8113)
1,2-Bis(2-aminophenoxy)ethane-N,N,N',N'-tetraethanoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ EMF KNO3 25°C 0.10M C T H K1=11.42 1990HLa (101894) 756
K(ErL+H)=3.31
Method: Competitive reaction with Hg++, using Hg indicator electrode.
Data for 15-35 C. DH(K1)=-40.3 kJ mol-1, DS(K1)=83.5 J K-1 mol-1.
****
C22H26N4O10 H4L BAPTA (7230)
1,2-Bis(o-aminophenoxy)ethane-N,N,N',N'-tetraethanoic acid;
((HOOCCH2)2NCH(OC6H4NH2)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl R4N.X 25°C 0.10M C K1=10.54 1993YTa (101975) 757
****
C22H28O13S2 H2L DSDB21C7 CAS 204931-02-2 (7821)
2,3:11,12-Dibenzo-1,4,7,10,13,16,19-heptaoxacycloheneicosa-2,11-diene-4',4"-disulfo
nic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ dis R4N.X 25°C 0.12M C K1=1.31 1998SUa (102075) 758
Medium: 0.12 M Et4NBr.
Method:solvent extraction into cyclohexane/di(2-ethylhexyl)phosphoric acid
****
C23H18N2O3 HL (5561)
2-(2-Acetylphenylhydrazone)-1,3-diphenyl-prop-1,3-dione;
C6H5.CO.C(CO.C6H5):N.NH.C6H4.COCH3

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl diox/w 30°C 75% U K1=11.35 B2=20.49 1988ESb (102591) 759
****
C23H23NO5 L CAS 218619-58-0 (7808)
Dibenzo-pyridino-18-crown-6;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ sp non-aq 25°C 100% C K1=1.62 2003ZRa (102657) 760
Medium: DMSO. Method: competition with murexide.
****
C23H24N4O2 L Trichachnine CAS 1251-85-0 (2606)
4,4'-Diantipyrylmethane,
4,4'-phenylmethylene-bis-(1,2-dihydro-1,5-dimethyl-2-phenylpyrazol-3-one
---

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Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      sp  diox/w 25°C 100%  U        K1=4.17        1995KMa (102670) 761
*************************************************************************
C24H32O14S2          H2L                      CAS 204931-03-3  (7822)
2,3:11,12-Dibenzo-1,4,7,10,13,16,19,22-octaoxacyclotetracosa-2,14-diene-4',4"-disul
fonic acid;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      dis R4N.X  25°C 0.12M C        K1=1.35        1998SUa (103191) 762
Medium: 0.12 M Et4NBr.
Method:solvent extraction into cyclohexane/di(2-ethylhexyl)phosphoric acid
*************************************************************************
C26H23N5O2            HL                        (5918)
Hippuric monohydrazone-3-hydrazino-4-benzyl-6-phenylpyridazine;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      gl  diox/w 30°C  75%  U        K1=11.61  B2=22.15  1985RSb (103878) 763
*************************************************************************
C26H27N3O10          H4L                       (7231)
2-((2-Amino-5-methylphenoxy)-methyl)-6-methoxy-8-aminoquinoline-N,N,N',N'-tetraetha
noic acid;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      gl  R4N.X  25°C 0.10M C        K1=14.23       1993YTa (103961) 764
*************************************************************************
C27H24N4O              L    BAHP              (1023)
Benzoylacetone-monohydrazone-3-hydrazino-4-benzyl-6-phenylpyridazine;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      gl  diox/w 30°C  75%  U        K1=8.75        1983RSa (104382) 765
*************************************************************************
C27H29NO11             L    Adriamycin       CAS 25316-40-9  (2407)
Doxorubicin;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      sp  oth/un 25°C 0.02M U T H    K1=4.80        1985LSa (104454) 766
Medium: 0.02M pH 7.6 buffer
*************************************************************************
C28H40O6               L                        CAS 29471-17-8  (1262)
2,3:11,12-Bis(4'-tert-butylbenzo)-1,4,7,10,13,16-hexaoxacyclooctadecane;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
Er+++      gl  non-aq 25°C 100%  U        K1=3.16        1980MDb (104838) 767
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Medium: Propylene carbonate.

Medium: propylene carbonate

****

C28H40O10 L DiBz-30-crown10 CAS 104946-67-0 (1776)
2,3:17,18-Dibenzo-1,4,7,10,13,16,19,22,25,28-decaoxacyclotriaconta-2,17-diene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	ISE	non-aq	25°C	100%	U		K1=4.48	1982MDa (104882)	768

Medium: propylene carbonate

****

C28H52N4O10 H5L CAS 137203-80-6 (8096)
1-N-Dodecyltriethylenetetramine-N,N',N", N'",N"'-pentaethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	alc/w	25°C	50%	C		K1=22.1 K(ErL+H)=4.4	2001SYb (104988)	769

Medium: 50% EtOH/H2O, 0.10 M KNO3.

****

C31H24N4O HL CAS 88700-85-0 (1409)
1,2-Diphenyl-1,2-ethanedione-3-(4-benzyl-6-phenyl)-pyridazinyl hydrazone;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	diox/w	30°C	75%	U	I	K1=9.99	1983RRa (105401)	770

In 75% MeOH: K1=7.78; 75% DMS: 6.54

****

C33H45N7O3 L CAS 345349-93-1 (9178)
Tris[6-((2-N,N-diethylcarbamoyl)pyridyl)methyl]amine;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	nmr	KCl	25°C	1.0M	C	H	K1=2.14	2004BRa (105967)	771

Method: 1H nmr measurements in D2O. DH(K1)=27 kJ mol-1
DS(K1)=133 J mol-1K-1

****

C36H60O30 L a-Cyclodextrin CAS 10016-20-3 (6946)
alpha-Cyclodextrin, Cyclohexaamylose;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Er+++	gl	NaCl	25°C	0.10M	U	I	K1=3.46	1999FBa (106460)	772

In 0.1 M Me4NCl, K1=3.6.

****

C37H33N5O4 L (7366)
2,6-Bis(1-(3,5-dimethoxybenzyl)benzimidazol-2-yl)pyridine

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

Er+++ gl non-aq 25°C 100% C K2=5.1 1997PBa (106547) 773
K3=3.0
Medium: CH3CN; 0.1 M Et4NClO4
****
C37H44N2O13S H6L MeThymol Blue (428)
3,3'-Bis(N,N-di(carboxymethyl)aminomethyl)thymolsulfonephthalein;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ gl NaClO4 30°C 0.10M U 1980NAb (106592) 774
K(Er+H3L)=4.59
K(Er+H2L)=7.47
K(ErH2L+H)=4.27
Also data for ErHnL(OH) species
****
C45H66N10O6 L CAS 362613-35-2 (7912)
Tris[3-(6-diethylcarbamoylpyridine-2-carboxamide)propyl]amine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ sp non-aq 25°C 100% C I K1=6.9 2001RDa (107230) 775
Medium: CH3CN.
****
C62H94N2O4S2 L (8109)
5,11,17,23-Tetrakis(1,1-dimethylethyl)-25-27-bis[2-methylthio)ethoxy]...calix(4)are
ne;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ cal non-aq 25°C 100% U H K1=3.96 2001NJa (107701) 776
Method: microcalorimetry. Medium: MeCN.. DH(K1)=-171 kJ mol-1
****
C76H116N4O8 L (8156)
p-tert-Butylcalix(4)arene tetradiisopropylethanoamide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ cal non-aq 25°C 100% U H K1=4.29 2001NJa (107878) 777
Method: microcalorimetry. Medium: MeCN.. DH(K1)=-81.2 kJ mol-1
****
Polymer HL Bleomycin (2324)
Bleomycin A2, B2 etc.

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
Er+++ sp oth/un 25°C ? U 1980LPb (108086) 778
K1eff=5.0 pH 6.8
Method: fluorescence

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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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