SC-Database
Software version = 5.81 Data version = 4.62
Experiment list contains 1456 experiments for
 (no ligands specified)
 Metal : K+
 (no references specified)
 (no experimental details specified)

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

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	EMF	KCl	25°C	0.0	C	I	K(K+e=K(Hg))=-37.15(-2.19766V)	1997BMa (612)	1

Method: K(Hg) amalgam electrode. Data for 0-0.6 mass fraction MeOH/H2O, 0.05-2.0 m KCl. K=-36.43 (E=-2.1554 V, x=0.2); K=-35.75 (E=-2.1149, x=0.4)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	EMF	mixed	25°C	10%	U	I	K(K+e=K(s))=-49.27(-2.915V)	1974DKb (613)	2

Medium: 10% w/w DMSO/H2O; K=-49.04(-2.901V,20%), -48.43(-2.865V,40%), -47.74(-2.824V,60%)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	oth	none	25°C	0.0	U	I	K(K+e=K(s))=-49.87 (-2950mV)	1972COa (614)	3

Method: Estimated. MeOH: -54.02(-3.196V).EtOH: -52.63(-3.131V).BuOH: -50.36 (-2.979V).PentOH: -50.36(-2.979V).Me2CO: -49.26(-2.914V)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	oth	none	25°C	0.0	U	I	K(K+e=K(s))=-49.87 (-2950mV)	1972COa (615)	4

Method: Estimated. MeCN: -56.58(-3.347V).HCOOH: -59.52(-3.521V).
Also NH3 and N2H4

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	EMF	mixed	25°C	30%	U	I	K(K+e=K(s))=-49.29(-2.916V)	1972KRb (616)	5

In: 30% w/w ethylene glycol/H2O; K=-49.17(-2.909V,w=50),-49.04(-2.901V,w=70) -49.46(-2.926V,w=90), -50.68(-2.998V,100%)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	EMF	non-aq	25°C	100%	U	I	K(K+e=K(s))=-49.73(-2.942V)	1972KRc (617)	6

Medium: 30% w/w propylene glycol/MeOH; 0% PG: K=-49.60(-2.934V). 50%: -49.92 (-2.953V). 70%: -50.19(-2.969V). 90%: -50.37(-2.980V). 100%: -50.64(-2.996V)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	-34°C	100%	U		K(K + e(solv))=2.24 K(2K=K2)=3.18	1969DLa (618)	7

Medium: NH3(liquid)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	EMF	alc/w	25°C	100%	U	I		1968DIb (619)	8

K(K+e=K(s))=-48.43, -2865 mV
At I=0 corr: K=-49.41, -2923.0 mV. Also values for 6 EtOH/H2O mixtures
---
K+ EMF none 25°C 0.0 U 1967BHc (620) 9
K(K+e=K/Hg)=-33.33, -1971 mV

K+ EMF non-aq 25°C 100% U 1966LCa (621) 10
K'=-51.073, -3020.2 mV
Medium: CH3NHCHO. K': K + Cl + Ag(s)=K(s) + AgCl(s)

K+ EMF alc/w 25°C 100% U 1958BSb (622) 11
K(K+e=K(s))=-49.38(-2921 mV)
Medium: MeOH

K+ EMF non-aq 25°C 100% U T 1954PSa (623) 12
K(K+e=K(s))=-48.55(-2.872V)
Medium: formamide; K=-49.65(-2.868V, 18 C)(M units)

K+ EMF none 25°C 0.0 U 1923LRa (624) 13
K(K+e=K(s))=-49.42(-2922.4 mV)
****
BF4- HL (2497)
Tetrafluoroborate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=1.7 1975YKa (1194) 14
Medium: MeCN
****
BO4H4- HL Borate CAS 10043-35-3 (991)
Borate; B(OH)4-

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp oth/un 25°C 1.00M U I K1=0.45 1990RAa (1312) 15
Medium: KCl. Data at I=0 M and at pressures to 2041 atmos.
****
Br- HL Bromide CAS 10035-10-6 (19)
Bromide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U T K1=2.37 1993TAa (2070) 16
Medium: 2-methoxyethanol, -10 to 80 C

K+ con non-aq 25°C 100% U I K1=0.00 1978CAa (2071) 17
Medium: Acetonitrile. Data also for (hexyl)4N+ and (amyl)4N+

K+ con non-aq 25°C 100% U K1=1.67 1974HPb (2072) 18
Medium: hexamethylphosphotriamide. K1 by Pitts eqn. K1=1.70 (Fuoss-Hsia eqn)

K+ con non-aq 25°C 100% U K1=4.35 1973TKb (2073) 19
Medium: liquid SO2, 0 corr

K+ con non-aq 25°C 100% U K1=1.8 1971ENa (2074) 20
Medium: trifluoroethanol. K1=1.68 to 1.91

K+ con mixed 25°C 8% U I K1=0.70 1970BKb (2075) 21
Medium: 8% t-butanol/H2O. K1=0.90(10%), 0.62(15%), 1.08(20%), 2.60(50%)

K+ con non-aq 25°C 100% U K1=-0.25 1970CDa (2076) 22
Medium: DMSO

K+ sol non-aq 25°C 100% U I 1967AKa (2077) 23
Kso=-2.4
Medium: DMF. In (Me3N)3PO: Kso=-4.0

K+ con non-aq 25°C 100% U K1=3.38 1965BFb (2078) 24
Medium: diaminoethane

K+ con non-aq 0°C 100% U T H K1=3.84 1956LLa (2079) 25
Medium: liquid SO2. K1=3.70(-8.93C), DH(K1)=22.0 kJ mol-1, DS=155 J K-1 m-1

K+ con non-aq 30°C 100% U K1=6.96 ? 1954JGa (2080) 26
Medium: CH3CO2H

K+ con non-aq -34°C 100% U K1=2.72 1949HKa (2081) 27
Medium: liquid NH3

****

BrO3- HL Bromate (6017)
Bromate;

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

---

K+ cal none 25°C 0.0 C IH 1992BVa (2414) 28
DH(Kso)=41.5 kJ mol-1, measured for I=0.002-0.02 M self medium.
Also data for 0.047-0.228 mol fraction MeOH/H2O.

K+ con none 25°C 0.0 U K1=-0.33 1971JBa (2415) 29

K+ con none 25°C 0.0 U K1=-0.35 1969BJa (2416) 30

K+ con none 25°C 0.0 U K1=-0.32 1969GUc (2417) 31

K+ oth oth/un 25?°C 0.0 M K1=0.1 1966MBb (2418) 32

K+ con alc/w 25°C 50% U K1=1.22 1958DTa (2419) 33
Medium: 50% EtOH/H2O

K+ con none 25°C 0.0 U K1=-0.60 1948MOa (2420) 34

```
--------------------------------------------------------------------------------
K+         con none   18°C  0.0  U        K1=-0.35       1927DAb  (2421)  35
********************************************************************************
CN-                    HL    Cyanide          CAS 74-90-8  (230)
Cyanide;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         con oth/un 25°C  0.0  U                        1970FKb  (2735)  36
                                          K(K+Ru(CN)6)=2.48
********************************************************************************
C6N6Co---              H3L    Cyanocobaltate     (5470)
Hexacyanocobaltate; [Co(CN)6]---
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         con oth/un 25°C       U        K1=1.0         1974FIb  (3494)  37
--------------------------------------------------------------------------------
K+         con none   18°C  0.0  U T      K1=1.26        1950JMc  (3495)  38
K1=1.22(25 C)
--------------------------------------------------------------------------------
K+         con none   25°C  0.0  U        K1=1.47        1947JAa  (3496)  39
********************************************************************************
C6N6Fe----             H4L                       (2191)
Hexacyanoferrate (II); Fe(II)(CN)6----
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         gl  KCl    25°C 0.10M C TIH    K1=1.80        1986CDc  (3571)  40
                                          B(K2Fe(CN)6)=2.14
                                          B(KHFe(CN)6)=4.63
Data for 10-35 C and 0.05-1.0 M KCl. DH(K1)=7.5 kJ mol-1, DS(K1)=71
J K-1 mol-1; DH(K2Fe(CN)6)=35.6, DS=184; DH(KHFe(CN)6)=32.2, DS=222
--------------------------------------------------------------------------------
K+         ISE oth/un 25°C  0.0  C        K1=2.39   B2= 5.46  1984DRa  (3572)  41
                                          K(2K+Fe(CN)6)=3.20
                                          K(3K+Fe(CN)6)=3.72
Method: potassium ISE. Extrapolated from data for 0.01-1.0 M KCl.
At I=1.0, K1=1.68, K(2K+Fe(CN)6)=1.96, K(3K+Fe(CN)6)=2.13.
--------------------------------------------------------------------------------
K+         con oth/un 25°C       U        K1=2.0         1974FIb  (3573)  42
--------------------------------------------------------------------------------
K+         sol KNO3   25°C 2.00M U        K1=2.6         1971HFa  (3574)  43
--------------------------------------------------------------------------------
K+         EMF oth/un 25°C       U        K1=2.28        1969NSa  (3575)  44
Assuming K(K+Fe(CN)6)=1.30
--------------------------------------------------------------------------------
K+         ISE oth/un 25°C .004M U  I     K1=1.78        1967EGa  (3576)  45
Method:K+ sensitive glass electrode.  Medium: K4L. K1=2.13(0.0004 M),
2.35(0 corr)
```

K+ gl oth/un 40°C .001M U T H K1=2.01 1967EGa (3577) 46
Medium: K4L. K1=1.95(10 C), 2.00(25 C). DH(K1)=2.5 kJ mol=1. By calorimetry: DH=4.1, DS=54

K+ ISE R4N.X 39°C 0.10M U TIH K1=1.6 1966CLb (3578) 47
Method:K+ glass electrode. Medium: Me4NCl. K1=1.5(25 C). At I=0 corr: K1=2.2(25 C), 2.4(39 C); DH=17 kJ mol-1, DS=96 J K-1 mol-1

K+ sp none 25°C 0.0 U K1=2.37 1957CPa (3579) 48

K+ con none 25°C 0.0 U K1=2.3 1949JAa (3580) 49

K+ con none 25°C 0.0 U K1=2.3 1937DAa (3581) 50
****
C6N6Fe--- H3L Ferricyanide (2491)
Hexacyanoferrate (III); Fe(III)(CN)6---

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl oth/un 25°C 1.30M U K1=1.9 1974HIa (3654) 51

K+ ISE oth/un 25°C .005M U K1=1.03 1967EGa (3655) 52
Medium: K3L. K1=1.29(I=0.001),1.46(0 corr). When I=0.00125: K1=1.21(10 C), 1.25(25 C), 1.28(45 C). By calorimetry: DH(K1)=2.1 kJ mol-1, DS=34 J K-1 m-1

K+ sol oth/un 25°C 3.0M U K1=0.30 1967RMd (3656) 53
Medium: LiNO3

K+ sol oth/un 25°C 3.0M U I K1=0.30 1967RMd (3657) 54
Medium: LiNO3. K1=0.18(I=2), -0.24(I=0.5), 0.90(I=0)
In LiCl: K1=-0.42(I=3), -0.49(I=2), -0.27(I=1), -0.22(I=0.5), 0.90(I=0)

K+ sol oth/un 25°C 3.0M U K1=0.30 1967RMd (3658) 55
Medium: LiNO3

K+ ISE R4N.X 25°C 0.10M U T K1=0.85 1966CLb (3659) 56
Medium: Me4NCl. 39 C: K1=0.9

K+ ISE oth/un 25°C 0.0 U T H K1=1.4 1966CLb (3660) 57
Medium: 0 corr. 39 C: K1=1.5. DH=-12 kJ mol-1, DS=-62 J K-1 mol-1

K+ sol oth/un 25°C 3.0M U H K1=-0.42 1966MRb (3661) 58
Medium: LiCl. By calorimetry: DH(K1)=-22.6 kJ mol-1, DS=-84 J K-1 mol-1

K+ con none 18°C 0.0 U T K1=1.30 1950JMc (3662) 59
K1=1.22(25 C)

K+ con none 25°C 0.0 U K1=1.40 1949MOa (3663) 60
****

C8N8W-- H2L (2192)
Octacyanotungstate (VI); W(VI)(CN)8--

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	oth/un	25°C	0.00		U	K1=1.36	1976LLa (3703)	61

****

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

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	mixed	25°C	20%	C	I	K1=1.73	2001BSa (5116)	62

Medium: 20 % w/w ethylene carbonate/water. Data for 20-80 % w/w ethylene carbonate/water.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	none	25°C	0	C	I	K1=-0.51	1995RGa (5117)	63

I=0.16 (Me4N.X) K1=-0.69; I=0.5 (Me4N.X) K1=-0.68.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	oth	alc/w	25°C	100%		U	K1=1.08	1982GBa (5118)	64

Medium: MeOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sol	alc/w	25°C	50%		U I	Kso(KCl)=-0.706	1982MPe (5119)	65

Method: K ion selective electrode. Data for 10-90% w/w MeOH/H2O.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	nmr	KCl	25°C	0.10M		U M	K(K(18-crown-6)+L)=0.7	1982SYa (5120)	66
K+	con	mixed	25°C	50%		U	K1=2.2	1974KKc (5121)	67

Medium: 50% w/w EtOH/acetone. K1=2.02 to 2.32(depending upon eqn used)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%		U	K1=4.73	1973TKb (5122)	68

Medium: liquid sulfur dioxide

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	mixed	20°C	89%		U	K1=2.79	1973YKa (5123)	69

Medium: 89% w/w butanol/H2O

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%		U	K1=2.0	1971ENa (5124)	70

Medium: trifluoroethanol. K1=1.85 to 2.08

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	none	25°C	0.0		U	K1 < -1.59	1971HPa (5125)	71
K+	con	non-aq	25°C	100%		U	K1=0.07	1971PGa (5126)	72

Medium: N-methylformamide

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	none	25°C	0.0		U	K1=-0.76	1971PJa (5127)	73
K+	con	mixed	25°C	9.9%		U I	K1=0.30	1970BKb (5128)	74

Medium: 9.9% w/w t-butanol/H2O. K1=0.81(15.1%), 0.91(20.1%)

K+ con non-aq 25°C 100% U K1=0.38 1970CDa (5129) 75
Medium: DMSO

K+ con diox/w 25°C 50% U I K1=0.91 1970PSa (5130) 76
Medium: 50% w/w dioxan/H2O at 1 bar. K1=0.87(500 bar), 0.84(1000 bar),
In 70% dioxan: K1=2.32(1 bar), 2.21(500 bar), 2.14(1000 bar). Also 80% diox.

K+ con non-aq 25°C 100% U I K1=1.17 1970SAf (5131) 77
Medium: 9.57% w/w butanol/MeOH. K1=1.21(19.7%), 1.40(39.8%), 1.51(51.4%)

K+ con mixed 440°C 90% U I K1=-3.28 1969HFa (5132) 78
Medium: 90% argon/H2O. K1=-2.52(10%). Also other ratios

K+ con mixed 25°C 50% U I K1=1.0 1968BTc (5133) 79
Medium:50% THF. K1=1.59(70%),2.52(80%),2.97(85%),3.87(90%)

K+ con none 25°C 0.0 U K1=-0.10 1968CFa (5134) 80

K+ sol alc/w 25°C 100% U 1967AKa (5135) 81
Kso=-2.5
Kso=-5.4 in DMF

K+ oth oth/un 25°C 0.0 U 1967LEa (5136) 82
Kso(KCl,sylvite)=0.898

K+ con alc/w 25°C 60% U I K1=0.48 1965HKa (5137) 83
Medium: 60.3% EtOH. K1=1.06(79.3%), 1.37(87.9%)

K+ con non-aq 25°C 100% U I K1=1.43 1962SHd (5138) 84
Medium: HCOOH. K1=3.78 in CH3COOH

K+ con none 281°C 0.0 U T K1=0.31 1961WLa (5139) 85
I=0 corr. K1=0.92(306 C)

K+ con alc/w 25°C 100% U K1=2.10 1957GKa (5140) 86
Medium: EtOH

K+ gl diox/w 25°C 70% U K1=2.63 1957PGa (5141) 87

K+ EMF non-aq 25°C 100% U K1=6.88 1956BKa (5142) 88
Medium: CH3COOH

K+ con non-aq 0°C 100% U T H K1=4.13 1956LLa (5143) 89
Medium: liquid SO2. K1=3.97 (-8.93 C). DH(K1)=24.8 kJ mol-1, DS=170

K+ con alc/w 25°C 100% U K1=1.0 1951EKa (5144) 90
Medium: MeOH

K+ con non-aq -34°C 100% U K1=3.06 1949HKa (5145) 91
Medium: liquid NH3

K+ sol oth/un 25°C 0.0 U 1934AKa (5146) 92
Kso(KCl)=0.932
****
ClO3- HL Chlorate CAS 7790-93-4 (971)
Chlorate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal none 25°C 0.0 C IH 1992BVa (6037) 93
DH(Kso)=41.5 kJ mol-1, measured for I=0.002-0.02 M self medium.
Also data for 0.047-0.228 mol fraction MeOH/H2O.

K+ con none 25°C 0.0 C I K1=-0.22 1986SDa (6038) 94
Value derived from data for 0.001-0.05 self medium.

K+ con non-aq 25°C 100% U K1=0.69 1975AJa (6039) 95
Medium: DMSO

K+ nmr non-aq 25°C 100% U K1=1.44 1975SAd (6040) 96
Medium: hexamethylphosphoramide

K+ con none 25°C 0.0 U K1=-0.15 1972DDa (6041) 97

K+ con mixed 25°C 1.0% U I K1=-0.16 1972DDb (6042) 98
Medium: 1.0% w/w sulfolane/H2O. K1=-0.09(31.9%), 0.59(75.7%), 1.26(95.3%)

K+ con oth/un 18°C 0.0 U T K1=-0.18 1931BRb (6043) 99
K1=-0.04(25 C)

K+ con none 18°C 0.0 U K1=-0.17 1902KSa (6044) 100
****
ClO4- HL Perchlorate CAS 7001-90-3 (287)
Perchlorate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% M K1=1.45 1999DSd (6252) 101
Medium: acetonitrile.

K+ con mixed 25°C 20% C K1=0.87 1994SSb (6253) 102
Medium:20% w/w propylene carbonate/ethylene carbonate.

K+ con non-aq 25°C 100% C K1=0.031 1990SAb (6254) 103
Medium: propylene carbonate. K1 derived from literature data.

K+ con none 25°C 0.0 C T H K1=0.196 1988YOa (6255) 104
Data for 0-50 C. DH(K1)=-1.8 kJ mol-1, DS(K1)=-2.4 J K-1 mol-1.

K+ con none 25°C 0.0 C I K1=-0.46 1986SDa (6256) 105
Value derived from data for 0.001-0.05 self medium.

K+ con non-aq 25°C 100% U I K1=1.3 1982GCb (6257) 106
Medium: DMF. In DMF and 1,1,3,3-Tetramethylurea: K1=1.1; in DMF and DMSO: 1.0; in DMF and Hexamethylphosphotriamide: 0.9

K+ con non-aq 25°C 100% U I K1=1.3 1982GCb (6258) 107
Medium: DMF. In DMF and beta-picoline: K1=1.3. Other data given

---

K+ gl non-aq 25°C 100% U H K1=5.69 1981TMb (6259) 108
Medium: Glacial acetic acid. Alternative method: Spectrophotometry.
DH(K1)=-27 kJ mol-1

K+ sol oth/un 25°C 1.0M U K1=0.18 1980FSb (6260) 109
In 1.0 M LiClO4;
in 2.0 M K1=-0.04; ; in 3.0 M K1=0.4 in 4.0 M K1=0.6

K+ con non-aq 25°C 100% U K1=1.43 1978CAa (6261) 110
Medium: Acetonitrile

K+ con non-aq 25°C 100% U K1=10.7 1975AJa (6262) 111
Medium: hexamethylphosphoramide

K+ con non-aq 25°C 100% U K1=1.4 1975YKa (6263) 112
Medium: MeCN

K+ con oth/un 25°C ? U I K1=1.63 1974ADb (6264) 113
Medium: benzene/CH3CN. K1=0.146 in ethylene carbonate. Data for other media

---

K+ con non-aq 25°C 100% U I K1=1.45 1974ADb (6265) 114
Medium: MeCN. K1=0.20 in 19.2% MeCN in ethylene carbonate; 0.35 (29.3%); 0.74(53.1%); 1.00(69.2%). In H2O, I-0 corr: K1=-0.01

K+ con non-aq 25°C 100% U K1=0.95 1974HPb (6266) 115
Medium: hexamethylphosphotriamide. K1 by Pitts eqn, by Fuoss-Hsia: K1=1.25

K+ con non-aq 25°C 100% U I K1=1.54 1973DDa (6267) 116
in 14.6% w/w methanol-sulfolane;K1=1.05(14.6%),1.14(39.6%),1.29(60.1%), 1.47(88.0%),1.50(95.9%). Also MeCN-sulfolane and MeCN-benzene

---

K+ con non-aq 25°C 100% U K1=-0.2 1973JYa (6268) 117
Medium: propene carbonate;0 corr

K+ con alc/w 25°C 100% U K1=1.53 1972DAa (6269) 118
Medium: MeOH

K+ con non-aq 25°C 100% U K1=2.49 1971BHa (6270) 119
Medium: acetone

```
--------------------------------------------------------------------------------
K+         con none   25°C  0.0  U        K1=0.00        1971DAa  (6271) 120
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U T      K1=2.78        1971HEa  (6272) 121
Medium: acetone. -50 C: K1=2.64
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U                       1971JKa  (6273) 122
                                          Kso=-8.35
Medium: methylisobutyl ketone
--------------------------------------------------------------------------------
K+         con alc/w  25°C 100%  U        K1=1.92        1971NIa  (6274) 123
Medium: EtOH
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=0.31        1971PGa  (6275) 124
Medium: N-methylformamide
--------------------------------------------------------------------------------
K+         con mixed  25°C  70%  U  I     K1=1.51        1970ALa  (6276) 125
Medium: 70% w/w t-butanol/H2O. K1=2.79(80%). Medium 0 Corr.
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=1.09        1969FOc  (6277) 126
Medium: MeCN. 0 corr.
--------------------------------------------------------------------------------
K+         sol none   25°C  0.0  U                       1969GUb  (6278) 127
                                          Kso=-1.94
--------------------------------------------------------------------------------
K+         con none   25°C  0.0  U        K1=-0.08       1969GUc  (6279) 128
--------------------------------------------------------------------------------
K+         con mixed  25°C  85%  U        K1=1.66        1968BTc  (6280) 129
Medium: 84.5% THF
--------------------------------------------------------------------------------
K+         con alc/w  25°C 100%  U        K1=1.04        1968CPb  (6281) 130
Medium: MeOH. In MeCN: K1=1.23, also for MeOH-MeCN mixtures
--------------------------------------------------------------------------------
K+         ISE none   25°C  0.0  U T                     1968HRb  (6282) 131
                                          Kso=-2.02
--------------------------------------------------------------------------------
K+         sol alc/w  25°C 100%  U  I                    1967AKa  (6283) 132
                                          Kso=-4.5
Medium: MeOH. In DMF: Kso=-0.1
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=1.13        1967KHe  (6284) 133
Medium: MeCN
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U T      K1=1.75        1966MWb  (6285) 134
Medium: MeCN, also at 20 C, 30 C
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=1.99        1962MWa  (6286) 135
Medium: MeCN
--------------------------------------------------------------------------------
K+         con none   25°C  0.0  U        K1=-0.48       1945JOa  (6287) 136
```

****
CrO4-- H2L Chromate CAS 7738-94-5 (2382)
Chromate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ oth none 25?°C 0.0 M K1=0.8 1966MBb (6494) 137
****
F- HL Fluoride CAS 7644-39-3 (201)
Fluoride;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp oth/un 25°C 1.0M U I K1=0.10 1993MAa (6976) 138
K1 values over a range of pressures and ionic strengths

K+ ISE NaClO4 25°C 1.0M U TI K1=-1.7 1984CTd (6977) 139
****
HPO3-- H2L Phosphite CAS 13598-36-2 (6305)
Phosphite;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con oth/un 20°C 0.0 U K1=0.80 1964FPa (7512) 140
K(K+HL)=0.74
****
H2O L Water CAS 7732-18-5 (6115)
Water

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sol non-aq 20°C 100% U K1=-0.40 1971CBc (7594) 141
Medium:propene carbonate

K+ sol non-aq 25°C 100% U K1=0.0 1967CKa (7595) 142
Medium: MeCN
****
I- HL Iodide CAS 10034-85-2 (20)
Iodide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% C T K1=1.40 2001SSa (8187) 143
Medium: N,N-dimethylformamide. Data for -40 to 25 C.

K+ con mixed 25°C 20% C K1=1.82 1994SSb (8188) 144
Medium:20% w/w propylene carbonate/ethylene carbonate.

K+ con non-aq 25°C 100% U K1=0.70 1982GCa (8189) 145
Medium: DMF

K+ con non-aq 25°C 100% U K1=0.43 1976RMa (8190) 146
Medium: 3-methylsulfonate

K+ nmr non-aq 25°C 100% U K1=0.633 1975SAd (8191) 147
Medium: hexamethylphosphoramide

K+ con oth/un 25°C ? U I K1=-0.06 1974ADb (8192) 148
In ethylenecarbonate: K1=0.11

K+ con non-aq 25°C 100% U K1=0.79 1974HPb (8193) 149
Medium: hexamethylphosphotriamide. Calculated using Pitts eqn. By Fuoss-Hsia
K1=1.22

K+ con alc/w 25°C 100% U T H K1=1.51 1974SKa (8194) 150
Medium: MeOH. DH(K1)=2.1 kJ mol-1. K1=1.49 (15 C), 1.51 (35 C), 1.53 (45 C).
Data in alcohols up to nonyl alcohol. In BuOH:DH=25.5;K1=2.87(15 C)3.32(45C)

K+ con non-aq 25°C 100% U T H K1=3.97 1974SKa (8195) 151
Medium: hexanol. DH(K1)=23.0 kJ mol-1. K1=3.80(15 C), 4.09(35 C), 4.20(45 C)
In nonyl alcohol: DH(K1)=39.3; K1=4.25(15 C),4.69(25 C),4.76(35 C),4.98(45C)

K+ oth none 25°C 0.0 M K1=-1.54 1973SOb (8196) 152
Estimated from literature data. K(Rb+I)=-1.52, K(Cs+I)=-0.70

K+ con non-aq 25°C 100% U K1=3.98 1973TKb (8197) 153
Medium: liquid SO2

K+ con non-aq 25°C 100% U K1=2.15 1972IWa (8198) 154
Medium: acetone

K+ con alc/w 25°C 93.7M U K1=1.28 1971BPa (8199) 155
Medium: 93.7% w/w EtOH/H2O

K+ con non-aq 25°C 100% U K1=1.75 1971ENa (8200) 156
Medium: trifluoroethanol

K+ con non-aq 25°C 100% U K1=2.45 1971HNb (8201) 157
Medium: propanol

K+ con alc/w 25°C 100% U I K1=0.96 1971SSb (8202) 158
Medium:MeOH. K1=1.83 (EtOH), 2.52 (PrOH), 3.02 (BuOH), 3.58 (PentOH)
3.97 (HexOH), 4.38 (HeptOH), 4.66 (OctOH), 5.14 (NonOH).

K+ con alc/w 25°C 100% U I K1=0.36 1970BWc (8203) 159
Medium: MeOH; K1=1.59 in EtOH

K+ con non-aq 25°C 100% U K1=-1.10 1970CDa (8204) 160
Medium: DMSO

```
K+         con oth/un 55°C  0.0  U T      K1=-0.14       1968ATb  (8205) 161
K1=-0.20(5 C),-0.19(15,25 C),-0.15(35 C),-0.14(45 C)
--------------------------------------------------------------------------------
K+         sol non-aq 25°C 100%  U                       1967AKa  (8206) 162
                                        Kso=-0.5
Medium: DMF
--------------------------------------------------------------------------------
K+         con non-aq 140°C 100%  U        K1=2.07       1967BNb  (8207) 163
                                        K(K+KI)=4.4
Medium: liquid I2
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U  I     K1=1.00       1967JTa  (8208) 164
Medium: HOC2H4NH2. K1=2.62(EtCOMe),1.83(PhCOMe),3.56(pyridine),1.09(MeCN),
2.02(PhCN),1.98(acetone),2.41(PrOH)
--------------------------------------------------------------------------------
K+         dis none   25°C  0.0  U                     1967RMe  (8209) 165
                                        Kd(K+I=K(TBP)+I(TBP))=-1.64
With (i-amylO)2MePO: Kd=-1.57
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=2.25       1966SAa  (8210) 166
Medium: acetone
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=2.98       1965BFb  (8211) 167
Medium: diaminoethane
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U  I     K1=3.32       1964FMb  (8212) 168
Medium: diaminoethane. K1=3.82(diaminopropane)
--------------------------------------------------------------------------------
K+         con non-aq 35°C 100%  U T      K1=-1.29      1964JMb  (8213) 169
Medium:MeCN. K1=-2.02( C), -1.05(25 C)
--------------------------------------------------------------------------------
K+         con alc/w  25°C 100%  U T      K1=1.68       1961BKb  (8214) 170
Medium: EtOH. K1=1.55(15 C), 1.82(40 C)
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=2.29       1957HUa  (8215) 171
Medium: PhCOMe. Alternative value K1=2.35
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=2.67       1956HUa  (8216) 172
Medium: EtCOMe
--------------------------------------------------------------------------------
K+         con non-aq  0°C 100%  U T H    K1=3.52       1956LLa  (8217) 173
Medium: liquid SO2. K1=3.37(-8.93 C). DH(K1)=23 kJ mol-1, DS=154 J K-1 mol-1
--------------------------------------------------------------------------------
K+         con non-aq -34°C 100%  U        K1=2.39       1949HKa  (8218) 174
Medium: liquid NH3
********************************************************************************
IO3-                    HL    Iodate           CAS 7782-68-5  (1257)
Iodate;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
```

K+ sol oth/un 25°C 3.0M U H K1=-0.28 1984DSa (8522) 175
in 3.0 M LiClO4; Also in 2.0 M LiClO4 K1=-0.40; in 4.0 M LiClO4 K1=0.04
in 1.0 M LiClO4 K1=0.

K+ EMF none 25°C 0.0 U 1973KCb (8523) 176
Kso(KL(s))=-1.64
By conductivity: Kso=-1.6

K+ EMF non-aq 25°C 100% U TI 1973KCb (8524) 177
Kso=-7.2
Medium: MeOH. By conductivity: Kso=-7.3. In DMSO: Kso=-7.7; by cond.:-7.4

K+ con none 25°C 0.0 U K1=-0.3 1971JBa (8525) 178

K+ con none 25°C 0.0 U K1=-0.24 1969BJa (8526) 179

K+ con mixed 25°C 14% U I K1=0.16 1969SHe (8527) 180
Medium: 14.3% w/w glycerol/H2O. K1=-0.08(0%), 0.35(25.7%), 0.75(32.0%),
0.88(44.5%), 1.02(58.7%), 1.33(70.2%)

K+ con diox/w 25°C 30% U I K1=0.37 1959BOa (8528) 181
Medium: dioxan/H2O, I=0 corr. K1=-0.39(0%), -0.11(9.5%), 0.16(17.9%),
0.59(37.2%), 0.89(43.8%), 1.18(49.6%), 1.57(57.1%)

K+ con none 25°C 0.0 U K1=-0.25 1956SPc (8529) 182

K+ con none 25°C 0.0 U K1=-0.23 1948MOa (8530) 183

K+ con none 18°C 0.0 U K1=-0.30 1927DAb (8531) 184
****
IO4- HL Periodate CAS 13444-71-8 (6063)
Periodate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con none 25°C 0.0 U 1948MOa (8606) 185
K(K+HL)=0.24
****
IrCl6--- H3L (1615)
Hexachloroiridate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl KCl 25°C 0.10M U T K1=1.56 1978SKc (8623) 186
Data also available when T=35, 42 and 50.
Alternative method: Kinetic studies.
****
MnO4- HL Permanganate CAS 13456-41-3 (5678)
Manganate(VII), Permanganate;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	none	25°C	0.0	C			2003KUa (8633)	187
							K(KA+L)=1.97		
							K(K+A(org)+L=KAL(org))=5.26		

Distribution from water into 1,2-dichloroethane. K ISE in aqueous phase.
Calc. from data for self-medium, I < 0.004 M. A is 18-crown-6.

****

MoO4-- H2L Molybdate (443)
Molybdate;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	oth/un	25°C	?	U	M		1997STa (8737)	188
							K(2K+H2L=K2L+2H)=-2.3		

Ligand: nano-Molibdenomanganate, MnMo9O32------

****

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

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	none	25°C	0.0	C	IH		1992BVa (9384)	189

DH(Kso)=13.1 kJ mol-1, measured for I=0.002-0.02 M self medium.
Also data for 0.047-0.228 mol fraction MeOH/H2O.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	oth/un	25°C	0.0	U		K1=-0.11	1964PSh (9385)	190

****

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

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	mixed	25°C	20%	C	I	K1=1.87	2001BSa (9717)	191

Medium: 20 % w/w ethylene carbonate/water. Data for 20-80 % w/w ethylene carbonate/water.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	none	25°C	0.0	C	T H	K1=0.083	1988YOa (9718)	192

Data for 0-50 C. DH(K1)=-0.5 kJ mol-1, DS(K1)=0.0 J K-1 mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	none	25°C	0.0	C	I	K1=-0.22	1986SDa (9719)	193

Value derived from data for 0.001-0.05 self medium.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sol	oth/un	25°C	1.0M	U		K1=0.04	1980FSb (9720)	194

In 1.0 M LiClO4;in 2.0 M K1=-0.1; in 3.0 M K1=-0.05; in 4.0 M K1=0.04
in 1.0 M LiNO3 K1=-0.7

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=2.03	1974HPb (9721)	195

Medium: Hexamethylphosphotriamide. K=2.05 using Fuoss-Hsia equation

```
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=1.77        1973BMd  (9722) 196
Medium: Hexamethylphosphotriamide
--------------------------------------------------------------------------------
K+         con diox/w 25°C  45%  U  I     K1=2.79        1972SAc  (9723) 197
Medium: Dioxan/MeOH mixtures. In 0% dioxan: K1=1.26. 29.3%: 2.00.
52.6%: 3.27. 62.3%: 4.09
--------------------------------------------------------------------------------
K+         con oth/un 25°C  0.0  U        K1=-0.22       1971HPa  (9724) 198
--------------------------------------------------------------------------------
K+         con oth/un 25°C  0.0  U        K1=-0.135      1971JBa  (9725) 199
--------------------------------------------------------------------------------
K+         con oth/un 25°C  0.0  U        K1=-0.16       1971PJa  (9726) 200
--------------------------------------------------------------------------------
K+         con oth/un 25°C  0.0  U        K1=-0.12       1969BJa  (9727) 201
--------------------------------------------------------------------------------
K+         con oth/un 25°C  0.0  U        K1=-0.26       1969GUc  (9728) 202
--------------------------------------------------------------------------------
K+         con diox/w 25°C  0.0  U  I     K1=0.20        1969MFb  (9729) 203
Also data for dioxan/H2O mixtures
--------------------------------------------------------------------------------
K+         con diox/w 25°C  65%  U  I     K1=1.60        1969SBe  (9730) 204
In 59.8% dioxan, K1=1.18; 71.8%: 2.25; 76.3%: 2.70
--------------------------------------------------------------------------------
K+         con alc/w  25°C 100%  U  I     K1=1.18        1969SBe  (9731) 205
In MeOH/dioxan mixtures, 43.9% MeOH: K1=3.62; 53.2%: 2.91; 61.4%: 2.44;
69.6%: 2.17
--------------------------------------------------------------------------------
K+         ISE R4N.X  25°C 0.10M U T H    K1=-0.4        1966CLb  (9732) 206
Medium: Me4NCl. K1=-0.5(39 C). I=0 corr: K1=-0.15(25 C), -0.25(39 C).
DH=-13 kJ mol-1, DS=-52 J K-1 mol-1
--------------------------------------------------------------------------------
K+         con none   25°C  0.0  U        K1=0.1         1966MBb  (9733) 207
--------------------------------------------------------------------------------
K+         con alc/w  25°C  83%  U        K1=1.59        1963PSa  (9734) 208
Medium: 83% EtOH, I=0 corr.
--------------------------------------------------------------------------------
K+         con oth/un 25°C  0.0  U        K1=-0.24       1955RSa  (9735) 209
--------------------------------------------------------------------------------
K+         oth oth/un 25°C  0.0  U                       1937ROa  (9736) 210
Method: Partial prssure of H2O. K1=0.06 to -0.08
--------------------------------------------------------------------------------
K+         oth oth/un 18°C  0.0  U        K1=-0.14       1927DAb  (9737) 211
--------------------------------------------------------------------------------
K+         oth oth/un 18°C  0.0  U        K1=-0.11       1927ONa  (9738) 212
********************************************************************************
OH-                    HL    Hydroxide          (57)
Hydroxide;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
```

K+ nmr R4N.X 25°C 3.4M C K1=-0.8 2002PLa (11659) 213
Method NMR K-39
Medium: 3.4 M Me4NCl/Me4NOH
****
PF6- HL (2404)
Hexafluorophosphate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=1.3 1975YKa (12765) 214
Medium: MeCN
****
PO4--- H3L Phosphate CAS 7664-38-2 (176)
Phosphate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl none 25°C 0.0 C TI K1=1.37 1991DDa (13226) 215
B(KHL)=13.21
B(KH2L)=19.79
B(K2L)=2.20
B(K2HL)=13.44
Data also for 10-50 C and 0.04-1.0 M NaCl, KCl or Et4NI

K+ gl KCl 37°C 0.15M C 1985DSa (13227) 216
K(K+HL)=0.48

K+ gl KNO3 25°C 0.50M C K1=0.54 1983DGa (13228) 217
K(K+HL)=0.36
K(K+H2L)=0.18

K+ gl KNO3 37°C 0.15M C K1=0.6 1983DGa (13229) 218
K(K+HL)=0.48
K(K+H2L)=-0.2

K+ gl R4N.X 25°C 0.20M U T HM 1956SAc (13230) 219
K(K+HL)=0.49
Medium: Pr4NCl. K=0.08(0 C). DH(K)=25 kJ mol-1, DS=100 J K-1 mol-1
****
P2O6---- H4L Hypophosphate CAS 9803-60-3 (199)
Hypophosphate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl R4N.X 25°C 0.50M U K1=0.36 1967CMc (13414) 220
Ligand: O3POPHO2---, Medium: Me4NCl
****
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
--------------------------------------------------------------------------------
K+         gl  NaCl   25°C 0.25M U  I     K1=1.6         1994SFb (13603) 221
                                          B(KHL)=9.7
                                          B(KH2L)=15.3
                                          B(K2L)=2.0
                                          B(K2HL)=9.5
Medium: Me4NCl. At I=0 corr. K1=2.4, B(KHL)=11.1, B(KH2L)=17.2,
B(K2L)=3.4, B(K2HL)=11.3
--------------------------------------------------------------------------------
K+         gl  KNO3   25°C 0.10M C TIH    K1=1.51        1985DRb (13604) 222
                                          B(KHL)=9.81
                                          B(KH2L)=15.5
                                          B(K2L)=2.14
                                          B(K2HL)=9.47
Data at 10-45 C and I=0.02-1.0 M. DH(K1)=-18 kJ mol-1; DS=-33. DH(KHL)=-9;
DS=154. DH(K2L)=27; DS=129. DH(K2HL)=36; DS=298 (by T coeff).
--------------------------------------------------------------------------------
K+         gl  KCl    25°C 0.50M U        K1=1.51        1982DNa (13605) 223
                                          K(K+HL)=0.46
--------------------------------------------------------------------------------
K+         gl  R4N.X  25°C 0.50M C        K1=1.50        1979DHa (13606) 224
                                          K(K+HL)=0.46
                                          K(KL+H)=7.4
                                          K(K+H2L=KHL+H)=5.5
Medium: 0.50 M Me4NCl.
--------------------------------------------------------------------------------
K+         cal R4N.X   5°C 1.00M U   H                    1973VAa (13607) 225
Medium: Me4NNO3, DH(K1)=2.9 kJ mol-1. 35 C, I=0, DH(K1)=7.2
--------------------------------------------------------------------------------
K+         gl  none   25°C  0.0  U T      K1=2.3         1959WOa (13608) 226
K1=2.3(40 C)
--------------------------------------------------------------------------------
K+         gl  R4N.X  25°C 1.00M U        K1=0.80        1957LWa (13609) 227
Medium: Me4NCl
********************************************************************************
P2O8----              H4L                     CAS 13825-81-5  (2402)
Peroxodiphosphate, also cyclic metaposphates, thiophosphates etc.;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         gl  R4N.X  25°C 1.00M U        K1=1.01        1960CEa (13691) 228
Medium: Me4NCl
********************************************************************************
P2W17O61----------           Polytungstate      (2102)
alpha-Heterodiphospho-polytungstate (usually alpha1 isomer)
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
```

```
K+         gl  R4N.X  25°C  1.0M U        K1=1.17        1982CCb (13720) 229
                                         K1=1.17
alpha2 isomer
********************************************************************************
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
--------------------------------------------------------------------------------
K+         gl  NaCl   25°C 0.25M U  I     K1=1.7         1994SFb (13868) 230
                                         B(KHL)=9.9
                                         B(KH2L)=14.7
                                         B(KH3L)=15.7
                                         B(K2L)=2.7
Medium: Me4NCl. B(K2HL)=9.7. At I=0 corr. K1=2.6, B(NaHL)=11.6,  B(NaH2L)=
17.0, B(NaH3L)=18.1, B(Na2L)=4.4, B(Na2HL)=12.0
--------------------------------------------------------------------------------
K+         gl  KNO3   25°C 0.10M C TIH    K1=1.55        1985DRb (13869) 231
                                         B(KHL)=9.76
                                         B(K2L)=2.81
Data at 10-45 C and I=0.02-1.0 M. DH(K1)=-9 kJ mol-1; DS(K1)=-3. DH(KHL)=
-8; DS(KHL)=156. DH(K2L)=-10; DS(K2L)=17. (by T coeff)
--------------------------------------------------------------------------------
K+         gl  oth/un 25°C 0.10M U        K1=2.53        1975SMa (13870) 232
                                         B(KH(P3O10))=11.64
--------------------------------------------------------------------------------
K+         gl  none   25°C  0.0  U T      K1=2.8         1959WOa (13871) 233
K1=2.8(40 C)
--------------------------------------------------------------------------------
K+         gl  R4N.X  25°C 1.00M U        K1=1.39        1957WLa (13872) 234
Medium: Me4NCl
********************************************************************************
P4O12----             H4L                      CAS 13598-74-8  (234)
Cyclotetrametaphosphate;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         gl  R4N.X  25°C 0.10M U        K1=1.84        1976KOb (14008) 235
********************************************************************************
P4O13------           H6L    Tetraphosphate     (1102)
Tetraphosphate;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         gl  R4N.X  25°C  1.0M U        K1=1.71        1967WMa (14046) 236
                                         K(K+HL)=1.11
Medium: Me4NCl
--------------------------------------------------------------------------------
K+         EMF oth/un 25°C  dil  U        K1=0.5         1950WCa (14047) 237
Ligand: mostly P5O16 7-. Data for many metals given but ligand uncertain
```

****
P6O12------ H6L CAS 25268-83-1 (6590)
Dodecaoxohexaphosphate(III); anion of (PO.OH)6

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	1.0M	U		K1=1.01	1960CEa (14060)	238

****
P6O18------ H6L (233)
Cyclohexametaphosphate;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	U		K1=2.30 B2=4.30	1976KOb (14071)	239

****
P8O24-------- H8L (232)
Cyclooctametaphosphate;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	U		K1=2.70 B2=4.90 B3=6.78	1976KOb (14083)	240

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

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sol	none	25°C	0.0	C		Kso(KReO4)=-2.59	1988HHb (14101)	241

Method: perrhenate ion selective electrode.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	oth/un	18°C	0.0	U		K1=1.2	1963SKa (14102)	242
K+	oth	none	25°C	0.0	U		K1=0.72	1948MOa (14103)	243

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

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	none	25°C	0.0	C	IH		1992BVa (15112)	244

DH(Kso)=24.2 kJ mol-1, measured for I=0.002-0.02 M self medium.
Also data for 0.047-0.228 mol fraction MeOH/H2O.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	C		K1=0.734	1990SAb (15113)	245

Medium: propylene carbonate.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=1.60	1978CAa (15114)	246

Medium: Acetonitrile

K+ con non-aq 25°C 100% U 1976DCa (15115) 247
K(KA+NCS)=2.00
In nitrobenzene. In 70% C6H5NO2/30% toluene, K=3.40, in 50%/50%, K=4.00
A=Dinitro-18-crown-6.

K+ con non-aq 25°C 100% U K1=1.86 1976RMa (15116) 248
Medium: 3-methylsulfonate

K+ con non-aq 25°C 100% U I K1=0.85 1976RMb (15117) 249
Medium: 1,3-Dimethylethyleneurea. In 1,3-Dimethylpropyleneurea K1=-0.078

K+ con non-aq 25°C 100% U K1=1.36 1973GKb (15118) 250
Medium: MeCN, I=0 corr

K+ con non-aq 25°C 100% U K1=0.5 1973JYa (15119) 251
Medium: propene carbonate, I=0 corr

K+ con non-aq 25°C 100% U K1=4.33 1973TKb (15120) 252
Medium: Liquid SO2, I=0 corr

K+ con non-aq 25°C 100% U K1=0.15 1971PGa (15121) 253
Medium: MeHNCHO

K+ con non-aq 25°C 100% U K1=1.41 1970YKb (15122) 254
Medium: MeCN, I=0 corr

K+ con non-aq 25°C 100% U K1=1.3 1967SCa (15123) 255
Medium: NC(CH2)4CN
****
SO3-- H2L Sulfite CAS 7782-99-2 (801)
Sulfite;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl R4N.X 25°C 1.0M C K1=0.22 1997CHa (15465) 256
Medium: 1.0 M Me4NCl.
****
SO4-- H2L Sulfate CAS 7664-93-9 (15)
Sulfate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con none 25°C 0.0 C H K1=0.91 1989YOa (16267) 257
Data for 0-50 C. DH(K1)=2.4 kJ mol-1, DS(K1)=25.7 J K-1 mol-1.

K+ EMF KCl 25°C 1.0M C K1=0.27 1988MOc (16268) 258
Method: Pt/H2 electrode. Data for 25-200 C.

K+ sol oth/un 25°C 3.0M U K1=-0.51 1984DSa (16269) 259

in 3.0 M LiClO4;

K+ gl NaCl 37°C 0.10M C I K1=0.54 1982DRb (16270) 260
Data for I=0.03-0.50 M NaCl. At I=0.0 M, K1=0.87

K+ oth oth/un 25°C 0.50M U TI K1=0.85 1980GAb (16271) 261
Method: Ultrasonic absorption. Medium: Na2SO4

K+ con none 25°C 0.0 U 1978FFa (16272) 262
K(K+KSO4)=0.093

K+ con none 25°C 0.0 C K1=1.02 1977FFa (16273) 263
P=1 atm. Also data for P=250-2000 atm.

K+ sol oth/un 25°C 0.70M C K1=0.265 1975EWa (16274) 264
Mixed medium of NaCl, KCl, MgCl2, NaClO4, Mg(ClO4)2, Na2SO4.
Method: solubility of gypsum.

K+ oth none 25°C 0.0 U T K1=0.84 1969HEa (16275) 265
Estimated from literature data. K1=1.00 (50 C), 1.06 (60 C), 1.30 (100 C),
1.60 (150 C); 1.94 (200 C)

K+ cal none 25°C 0.0 U H K1=0.75 1969IEa (16276) 266
DH(K1)=4.22 kJ mol-1, DS(K1)=0 (?)

K+ ISE R4N.X 39°C 0.10M U TI K1=0.5 1966CLb (16277) 267
Medium: Me4NCl. K1=0.4(25 C). At I=0 corr: K1=0.85(25 C), 0.95(39 C).
DH(K1)=12 kJ mol-1, DS=59 J K-1 mol-1

K+ ISE R4N.X 25°C 0.10M U T K1=0.52 1966CLb (16278) 268
Ligand: peroxodisulfate, S2O8--, not SO4--. Medium: Me4NCl. K1=0.56(39 C).
At I=0 corr: K1=0.92(25 C), 0.97(39 C); DH(K1)=8 kJ mol-1, DS=42 J K-1 mol-1

K+ con oth/un 700°C 0.0 U T 1966QMa (16279) 269
K(K+HL)=4.3
Medium:0 corr. p=0.40 g cm-3. K=1.16(p=0.70,400 C), 3.25(p=0.40,400 C),
1.95(p=0.7,700 C), also for many other p and T

K+ con oth/un 100°C 0.0 U T K1=1.3 1963QFa (16280) 270
K1=1.96(200 C), 1.35(300 C,density 1.0), 1.5(300 C,density 0.8)

K+ con diox/w 35°C 10% U I K1=0.9 1959DDa (16281) 271
I=0 corr. K1=1.0(20% dioxan), 1.3(30%)

K+ con oth/un 25°C 0.0 U K1=0.96 1950JMa (16282) 272

K+ con oth/un 18°C 0.0 U K1=0.82 1930RDa (16283) 273
****
S2O3-- H2L Thiosulfate CAS 73686-28-7 (177)
Thiosulfate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal R4N.X 25°C 0.50M U K1=0.26 1997MKa (16862) 274
DH(K1)=8.0 kJ mol-1

K+ cal oth/un 25°C 0.50M U H K1=0.28 1974ARa (16863) 275
DH=8.20 kJ mol-1.

K+ con alc/w 25°C 44% U K1=1.93 1956BMa (16864) 276
Medium: 44% EtOH

K+ sp alc/w 25°C 50% U K1=2.34 1956TMa (16865) 277
Medium: 50% EtOH

K+ sp none 25°C 0.0 U T K1=0.85 1955GMa (16866) 278
K1=0.85(15 C)

K+ sol none 25°C 0.0 U K1=0.92 1951DMb (16867) 279
****
S2O7-- L Pyrosulfate CAS 16057-15-1 (8430)
Pyrosulfate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con none 25°C 0.0 C T H K1=1.66 1996DPc (16918) 280
Data for 30-40 C. DH(K1)=10.2 kJ mol-1, DS(K1)=66 J K-1 mol-1.
****
SeO4-- H2L Selenate CAS 7783-08-6 (459)
Selenate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ oth oth/un 25°C var C 1999OCa (17104) 281
Kso(K2SeO4)=0.902
Method: osmotic coefficients. Medium: 1.1-4.7 m K2SeO4
****
SiO3-- H2L Silicate CAS 7699-41-4 (747)
Silicate; SiO2(OH)2--

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ oth none 150°C 0.0 U T 1969HEa (17213) 282
*Ks(KAlSi2O6+4H)=4.70
Method:est. data. *Ks=-1.14(microcline), -2.31(adularia),-1.25(highsanidine)
3.80(KAl3Si3O10(OH)2);-2.37(mantmorillanite). also other data, 60-300 C
****
SiW11O39-------- H8L (2464)
alpha-Heterosilicon-polytungstate;

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
K+         gl  R4N.X  25°C  1.0M U        K1=1.17        1982CCb (17236) 283
**************************************************************************
TcO4-                  HL                     CAS 13568-38-2  (1418)
Pertechnetiate;
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
K+         con oth/un 18°C  0.0  U        K1=0.91        1963SKa (17248) 284
--------------------------------------------------------------------------
K+         oth oth/un 25°C  0.0  U                       1953CSa (17249) 285
                                       Kso=-0.89
Method: Estimated value
**************************************************************************
VO4---                H3L                     CAS 15457-75-7  (1586)
Vanadate; VO2(OH)3-- or polymers
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
K+         gl  NaClO4 25°C 1.00M U                       1975KIc (17379) 286
                                       K(K+H7PV12O36)=2.42
--------------------------------------------------------------------------
K+         gl  R4N.X  20°C  1.0M U  I     K1=0.04        1963SGd (17380) 287
Medium: Me4NCl. In 0.1 M Me4NCl: K(K+H15L10)=1.4, K(K+H14L10)=2.4,
K(K+KH14L10)=1.0
**************************************************************************
CH2O2                  HL    Formic acid      CAS 64-18-6  (37)
Methanoic acid; H.COOH
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
K+         con non-aq 30°C 100%  U        K1=6.94        1954JGa (17620) 288
Medium: ethanoic acid
**************************************************************************
CH4O3S                 HL                     CAS 75-75-2  (595)
Methanesulfonic acid; CH3.SO3H
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
K+         con mixed  25°C  20%  C  I     K1=1.77        2001BSa (17938) 289
Medium: 20 % w/w ethylene carbonate/water. Data for 20-80 % w/w ethylene
carbonate/water.
--------------------------------------------------------------------------
K+         con mixed  25°C  20%  C        K1=2.06        1994SSb (17939) 290
Medium:20% w/w propylene carbonate/ethylene carbonate.
**************************************************************************
CH5O4P                 H2L                     CAS 2617-47-2  (1977)
Hydroxymethylphosphonic acid; HO.CH2.PO3H2
--------------------------------------------------------------------------
```

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	U		K1=0.34	1972WFa (18148)	291

Medium: (CH3)4NCl

****

CH6O6P2 H4L Medronic acid CAS 1984-15-2 (2384)

Methanediphosphonic acid; CH2(PO3H2)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.50M	U		K1=1.02 K(K+HL)=0.2	1967CIa (18283)	292

Medium: Me4NCl

****

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
K+	gl	NaCl	25°C	0.04M	C	TIH	K1=0.43 B(KHL)=3.60	1992DDb (18932)	293

DH(K1)=14 kJ mol-1, DS(K1)=56 J K-1 mol-1; DH(KHL)=8, DS(KHL)=96.
Data for 0.04-1.0 M NaCl and 10-45 C. At I=0.0 M, K1=0.71.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	KCl	37°C	0.15M	C		K1=0.41	1985DSa (18933)	294
K+	gl	KNO3	37°C	0.15M	C	IH	K1=0.41	1983DRb (18934)	295

Method: determination of protonation constant in KNO3 and [Et4N]NO3 media
Data for I=0.0-1.0 M KNO3. At I=0.0, K1=0.81; DH(K1)=4.2 kJ mol-1, DS=29

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	KNO3	37°C	0.10M	C		K1=0.43	1981DRa (18935)	296

Calculated from protonation data for I=0.03-0.3 M KNO3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sol	KNO3	37°C	dil	C		K1=1.00	1979TNa (18936)	297

Method: solubility in 0.03-0.30 M KCl or NaCl.
At I=0.0 M: Kso(CaL.3H2O)=-8.10; Kso(CaL.H2O)=-8.69.

****

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
K+	gl	R4N.X	25°C	0.25M	C	TIH	K1=-0.43	1985DRa (20011)	298

I=0.02-1 M Et4NI. 10-45 C. DH = 5 kJ mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.16M	U	TI	K1=-0.43	1985RSa (20012)	299

At 10 C: K1=-0.32 (I=0.04); 35 C: -0.35 (I=0.25); 45 C: -0.18 (I=0.16)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	non-aq	25°C	100%	U	H	K1=6.18	1981TMb (20013)	300

Medium: Glacial acetic acid. Alternative method: Spectrophotometry.

DH(K1)=-19.0 kJ mol-1

K+ gl non-aq 25°C 100% U K1=6.11 1964KLa (20014) 301
Medium: ethanoic acid

K+ sp non-aq 25°C 100% U K1=6.93 1961PSa (20015) 302
Medium: ethanoic acid

K+ EMF non-aq 25°C 100% U K1=6.15 1956BKa (20016) 303
Method: chloranil electrode. Medium: ethanoic acid

K+ con non-aq 30°C 100% U K1=6.44 1954JGa (20017) 304
Medium: ethanoic acid

****

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
K+	gl	R4N.X	37°C	0.25M	C	TI	K1=1.78	B(KHL)=8.78	1985DRa (21591)	305

Medium: 0.02-1 M NEt4I

****

C2H6OS L DMSO CAS 67-68-5 (329)
Dimethylsulfoxide; (CH3)2.SO

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	ISE	non-aq	25°C	100%	M		K1=0.46	B2=0.36	1988NHa (22103)	306

Medium: MeCN, 0.01 M Et4NClO4

****

C2H8O6P2 H4L CAS 6145-33-1 (3543)
Ethane-1,1-diphosphonic acid; CH3.CH(PO3H2)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	gl	R4N.X	25°C	0.50M	U		K1=1.2	K(K+HL)=0.28	1967CIa (23269)	307

Medium: Me4NCl

****

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

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	gl	KCl	25°C	0.15M	M	I	K1=1.73	K(K+HL)=1.60 K(K+H2L)=1.57	1987MKb (23377)	308

for 0.3 M KCl K1=1.10; K(K+HL)=1.02; K(K+H2L)=0.98
for 0.5 KCl K1=0.73; K(K+HL)=0.66; K(K+H2L)=0.64

```
--------------------------------------------------------------------------------
K+         gl  R4N.X  25°C 0.10M U                      1972WFa (23378) 309
                                        K(K+HL)=0.62
                                        B(2K+L)=2.04
Medium: (CH3)4NCl
--------------------------------------------------------------------------------
K+         gl  R4N.X  25°C 0.50M U        K1=1.79       1967CIa (23379) 310
                                        K(K+HL)=0.36
Medium: Me4NCl
********************************************************************************
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
--------------------------------------------------------------------------------
K+         gl  KNO3   20°C 1.89M M  I     K1=0.60       1999JDa (24472) 311
                                        B(KHL)=5.98
                                        B(K2L)=0.54
Also data for I=1.64 and 1.52 M.
--------------------------------------------------------------------------------
K+         gl  R4N.X  25°C 0.25M C TIH    K1=0.68       1985DRa (24473) 312
                                        B(KHL)=5.31
I=0.02-1 M Et4NI.T=10-45. DH(K1)=4;DH(KHL)=11 kJ mol-1. DS1=33; DS(KHL)=148
--------------------------------------------------------------------------------
K+         gl  KNO3   37°C 0.15M C  IH    K1=0.44   B2= 0.67  1983DRb (24474) 313
Method: determination of protonation constant in KNO3 and [Et4N]NO3 media
Data for I=0.0-1.0 M KNO3. At I=0.0, K1=0.85; DH(K1)=4.2 kJ mol-1, DS=30
--------------------------------------------------------------------------------
K+         gl  KNO3   37°C 0.15M C        K1=0.44       1982DRa (24475) 314
                                        K(K+HL)=0.2
********************************************************************************
C3H7NO                  L    DMF             CAS 68-12-2  (598)
N,N-Dimethylformamide; HCO.N(CH3)2
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         ISE non-aq 25°C 100%  M        K1=0.18   B2=0.04   1988NHa (25658) 315
Medium: MeCN, 0.01 M Et4NClO4
********************************************************************************
C3H7O5P               H3L                   CAS 5926-41-4  (3549)
2-Phosphonopropanoic acid; CH3.CH(PO3H2).COOH
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         gl  R4N.X  25°C 0.25M U        K1=1.08       1957WBa (27302) 316
Medium: 0.1-0.4 M (C3H7)4NI
********************************************************************************
C3H7O7P               H3L                   CAS 28474-06-8  (3552)
D-2,3-Dihydroxypropanoic acid 2-phosphate (D-2-phosphoglyceric acid)
--------------------------------------------------------------------------------
```

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         gl  R4N.X  25°C 0.25M U        K1=1.18        1957WBa (27331) 317
Medium: 0.1-0.4 M (C3H7)4NI
*************************************************************************
C3H10O6P2            H4L                      (3556)
Propane-2,2-diphosphonic acid; CH3.C(PO3H2)2.CH3
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         gl  R4N.X  25°C 0.50M U        K1=1.60        1967CIa (28400) 318
                                         K(K+HL)=0.35
Medium: Me4NCl
*************************************************************************
C4H2O3                L                     CAS 108-31-6  (4246)
Maleic anhydride;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  non-aq   ?  100%  U                        1971TGa (28621) 319
                                         K(KSCN+L)=-0.68
                                         K(2KSCN+L=(KSCN)2L)=0.84
Medium: CHCl3
*************************************************************************
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
-------------------------------------------------------------------------
K+         gl  R4N.X  25°C 0.25M C TI     K1=0.84        1985DRa (29090) 320
                                         B(KHL)=6.0
I=0.02-1 M Et4NI. Also 37 C
-------------------------------------------------------------------------
K+         gl  KNO3   37°C 0.15M C  IH    K1=0.48        1983DRb (29091) 321
Method: determination of protonation constant in KNO3 and [Et4N]NO3 media
Data for I=0.0-1.0 M KNO3. At I=0.0, K1=0.83; DH(K1)=4.2 kJ mol-1, DS=30
*************************************************************************
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
-------------------------------------------------------------------------
K+         gl  R4N.X  25°C 0.25M C TIH    K1=0.48        1985DRa (29981) 322
                                         B(KHL)=5.28
I=0.02-1M Et4NI.T=15-45 C. DH(K1)=4; DH(KHL)=3 kJ mol-1. DS1=30; DS(KHL)=121
-------------------------------------------------------------------------
K+         gl  KNO3   37°C 0.15M C  IH    K1=0.11   B2= 0.11  1983DRb (29982) 323
Method: determination of protonation constant in KNO3 and [Et4N]NO3 media
Data for I=0.0-1.0 M KNO3. At I=0.0, K1=0.53; DH(K1)=4.2 kJ mol-1, DS=24
*************************************************************************
```

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
K+	gl	R4N.X	25°C	0.25M	C	I	K1=0.32		1987DDd (30220)	324
							B(KHL)=4.07			

Medium: 0.012-0.975 Et4NI. At I=0.0 M, K1=0.78, B(KHL)=4.6

****

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
K+	gl	R4N.X	25°C	0.25M	C	TIH	K1=0.38		1985DRa (30653)	325
							B(KHL)=4.5			
K+	gl	KNO3	37°C	0.15M	C		K1=0.11	B2= 0.01	1983DRb (30654)	326

0.02-1 M NEt4I. 10-37 C. DH1=1; DH(KHL)=3 kJ mol-1. DS1=17; DS(KHL)=107

Method: determination of protonation constant in KNO3 and [Et4N]NO3 media
Data for I=0.0-1.0 M KNO3. At I=0.0, K1=0.45; DH(K1)=4.2 kJ mol-1, DS=23

K+	ISE	oth/un	25°C	0.10M	U		K1=0.18		1964RZa (30655)	327
K+	gl	R4N.X	?	0.28M	U		K1=0.23		1963EDa (30656)	328

Medium: Me4NBr

****

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
K+	gl	oth/un	25°C	0.0	C	I	K1=0.62		1999DGa (30886)	329
							B(KHL)=4.04			

Medium: artificial seawater. Extrapolated from data for 5-45% salinity.

K+	gl	R4N.X	25°C	0.25M	C	TIH	K1=0.25		1985DRa (30887)	330
							B(KHL)=3.5			

0.02-1 M NEt4I. 12.5-48 C. DH(K1)=9 kJ mol-1, DS=42; DH(KHL)=5, DS=94

****

C4H6O6 H2L D-Tartaric acid CAS 147-71-7 (93)
D-Tartaric acid, D-2,3-Dihydroxybutanedioic acid; HOOC.CH(OH).CH(OH).COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.1M	U	IH	K1=0.48	2005ZZa (30976)	331

Medium: Et4NCl; L or D isomer is not specified. For 0.3 mol/L K1=0.20

****

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
-------------------------------------------------------------------------------
K+         ISE R4N.X  25°C 0.20M U        K1=0.0         1972DMc (31286) 332
                                         K(K+HL)=-0.2
*******************************************************************************
C4H10N3O5P            H3L    Phosphocreatine    (3594)
Phosphocreatine, N-(Imino(phosphonoamino)methyl)-N-methylglycine;
H2O3P.HN.C(:NH)N(CH3)CH2COOH
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
K+         nmr R4N.X  37°C 0.25M C                        2002CFb (34638) 333
                                         K(K+HL)=-0.3
Method: 31P nmr. Medium: 20% v/v D2O/H2O, 0.25 M Me4NCl, pH 7.0.
*******************************************************************************
C4H10O                 HL    t-Butanol        CAS 75-65-0  (1740)
tert-Butanol, (CH3)3C.OH
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=2.30        1974ESa (34658) 334
Medium: DMSO
*******************************************************************************
C4H10O3                 L                      CAS 111-46-6  (3579)
2,2'-Oxydiethanol; (HO.CH2.CH2)2.O   (Diethylene glycol)
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  C        K1=3.6         1992MSe (34701) 335
Medium: 100% MeOH. Anion: picrate. Also data for nitrophenolate anions.
*******************************************************************************
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
-------------------------------------------------------------------------------
K+         sp  non-aq 25°C 100%  U        K1=1.399       1984AMa (38000) 336
In Dimethyl Sulfoxide (DMSO);
Data also for other di- and triketones and esters and their alkali enolates
-------------------------------------------------------------------------------
K+         gl  diox/w 30°C  75%  U        K1=5.60   B2=9.87   1975MMa (38001) 337
-------------------------------------------------------------------------------
K+         gl  alc/w  25°C 100%  U  I     K1=0.9         1965LIa (38002) 338
Medium: MeOH, 0.1 M KI.  In EtOH, 0.1 M KSCN: K1=2.1
*******************************************************************************
C6H3N3O7               HL    Picric acid      CAS 88-89-1  (593)
2,4,6-Trinitrophenol; HO.C6H2(NO2)3
-------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
```

K+ dis non-aq 25°C 100% C K1=2.97 1999KKb (42111) 339
Medium: MIBK. Method: distribution of metal picrates into MIBK containing HO(CH2.CH2.O)n.C12H25, n=4, 6 or 8.

K+ con non-aq 25°C 100% C T K1=2.58 1999VMa (42112) 340
Medium: 2-methoxyethanol. Data for 15-35 C.

K+ oth oth/un 25°C 0.04M C K1=0.15 1998TIa (42113) 341
Method: capillary electrophoresis.
Medium: 0.005 M phosphate buffer, pH 7.1, 0.04 M MCl.

K+ dis oth/un 25°C dil C 1998TKa (42114) 342
K(KA+L)=4.76
Self medium, I<0.03 M. Method: Extraction of KAL into dichloromethane.
A is 18-crown-6.

K+ sol none 25°C 0.0 C I 1979LPf (42115) 343
Kso(KL)=-3.39
Method: spectrophotometry. Also data for 10-100% w/w MeOH/H2O.

K+ con none 30°C 0.0 U I M K1=1.42 1979PSa (42116) 344
K(KL+2Trien-glycol)=1.39
K(KL+2Tetraen-glycol)=1.44

K+ sp non-aq 20°C 100% U K1=4.6 1978JId (42117) 345
Medium: CH2Cl2

K+ dis none 25°C 0.00 U I K1=1.64 1972IWc (42118) 346
In nitrobenzene: K1=2.92

K+ con none 25°C 0.00 M K1=1.64 1971YIa (42119) 347

K+ dis oth/un 25°C var U K1=2.4 1970SSb (42120) 348
Method: paper chromatography
****
C6H4N2O5 HL CAS 50-28-5 (505)
2,4-Dinitrophenol; HO.C6H3(NO2)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=1.94 1973FGa (42230) 349
Medium: tetrahydrofuran
****
C6H4N2O5 HL CAS 329-71-5 (507)
2,5-Dinitrophenol; HO.C6H3(NO2)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 20°C 100% U K1=4.6 1978JId (42243) 350

Medium: CH2Cl2

****

C6H4N2O5 HL CAS 329-71-5 (1941)

2,6-Dinitrophenol; HO.C6H3(NO2)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	20°C	100%	U		K1=4.7	1978JId (42247)	351

Medium: CH2Cl2

****

C6H4O3Cl2S HL CAS 88-42-6 (594)

2,5-Dichlorobenzenesulfonic acid; HO3S.C6H3(Cl)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	mixed	25°C	20%	C		K1=2.14	1994SSb (42294)	352

Medium:20% w/w propylene carbonate/ethylene carbonate.

****

C6H8O6 H3L Tricarballylic CAS 99-14-9 (1620)

1,2,3-Propanetricarboxylic acid; HOOC.CH2.CH(COOH).CH2.COOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	oth/un	25°C	0.0	C	I	K1=1.39	1994DFc (45566)	353
							B(KHL)=7.27		
							B(KH2L)=11.50		
							B(K2L)=1.75		
							B(K2HL)=6.66		

Values at I=0 calculated from data for 0.04-1.0 M KCl.

****

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
K+	gl	R4N.X	25°C	0.1M	U	IH	K1=0.84	2005ZZa (46144)	354
							K(2K+L)=1.09		

Mediumt: Et4NCl. For 0.3 mol/L K1=0.72; K(2Na+L)=0.92

K+	gl	oth/un	25°C	0.0	C	I	K1=1.42	1999DGa (46145)	355
							B(KHL)=7.13		
							B(KH2L)=11.3		
							B(K2HL)=7.0		
							B(K2L)=1.93		

Medium: artificial seawater. Extrapolated from data for 5-45% salinity.
B(NaKL)=2.47, B(NaKHL)=7.3.

K+	ISE	none	25°C	0	C	I	K1=1.42	1995RGa (46146)	356
							B(K2L)=1.95		

I=0.1 (Me4N.X) K1=0.92, B(K2L)=1.11; I=0.16 (Me4N.X) K1=0.87, B(K2L)=1.04.

```
--------------------------------------------------------------------------------
K+         gl  KNO3   37°C 0.15M U   H    K1=0.56        1980DRa (46147) 357
                                          B(KHL)=5.5
At 25C and zero ionic strength, DH1=5.44 kJ mol-1
--------------------------------------------------------------------------------
K+         ISE oth/un 25°C 0.10M U        K1=0.59        1964RZa (46148) 358
--------------------------------------------------------------------------------
K+         sp  R4N.X  25°C 0.10M C        K1=0.43        1961WAa (46149) 359
Medium: 0.16 M Me4NCl.
********************************************************************************
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
--------------------------------------------------------------------------------
K+         gl  KNO3   25°C 0.10M C TIH  T K1=0.79        1985DRb (46868) 360
                                          B(KHL)=9.86
Data at 10-45 C and I=0.02-1.0 M in KNO3. DH(K1)=17 kJ mol-1; DS=(K1)=70.
DH(KHL)=-3; DS(KHL)=176 (by T coeff.)
--------------------------------------------------------------------------------
K+         sp  R4N.X  25°C 0.10M C        K1=0.47        1985HAd (46869) 361
********************************************************************************
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
--------------------------------------------------------------------------------
K+         gl  R4N.X  37°C 0.25M C                         1985DRa (47571) 362
                                          B(KHL)=8.44
Medium: NEt4I
********************************************************************************
C6H14O3                 L    Diglyme          CAS 111-96-6  (6769)
bis-2-Methoxyethyl ether, 2,5,8-Trioxanonane; CH3.O.CH2CH2.O.CH2CH2.O.CH3
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  C        K1=3.6         1992MSe (51049) 363
Medium: 100% MeOH. Anion: picrate. Also data for nitrophenolate anions.
--------------------------------------------------------------------------------
K+         cal non-aq 25°C 100%  U  IH    K1=0.34        1991TNa (51050) 364
Medium: MeOH. DH(K1)=-24.5 kJ mol-1; TDS=-25.0. In MeCN: K1=0.71
********************************************************************************
C6H15NO3                    Triethanolamine  CAS 102-71-6  (447)
Tris-(2-hydroxyethyl)amine;                                              L
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U    M   K1=2.46        1976FGb (51296) 365
                                          K(KA+L)=1.30
A=Tetra-n-butylammonium-2,4-dinitrophenolate. Medium: Tetrahydrofuran
```

****
C6H15O15P3 H6L Ins(1,2,6)P3 CAS 28841-62-5 (6479)
D-myo-Inositol 1,2,6-trisphosphoric acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	U		K1=2.58 B(KHL)=11.46 B(KH2L)=18.06 B(K2L)=3.84	1991BSa (51536)	366

****
C6H16O3P2 L (2075)
Di(dimethylphosphinylmethyl) ether; Me2P(O)CH2.O.CH2.P(O)Me2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=2.26	1989KSa (51771)	367

Medium: tetrahydrofuran/CHCl3 4:1 (vol)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=2.26	1982YSa (51772)	368

Medium: tetrahydrofuran+CHCl3 4:1(vol); M is 2,4-dinitrophenolate
****
C6H18N3OP L HMPA CAS 680-31-9 (603)
Hexamethylphosphoramide, Tris-(dimethylamino)phosphine oxide;((CH3)2N)3PO

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	non-aq	25°C	100%	M		K1=0.84 B2=1.00	1988NHa (51980)	369

Medium: MeCN, 0.01 M Et4NClO4
****
C6H18O3Si3 L CAS 541-05-9 (1283)
Hexamethyl cyclotrisiloxane; ((CH3)2SiO)3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	alc/w	25°C	100%	U		K1=<-0.3	1980OPa (52215)	370

Medium: MeOH, 0.1 M Me4NBr
****
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
K+	gl	R4N.X	25°C	0.25M	C	TIH	K1=-0.5	1985DRa (54240)	371

I=0.02-1 M Et4NI. 10-45 C. DH = 8 kJ mol-1
****
C7H6O4 H3L CAS 303-38-8 (1398)
2,3-Dihydroxybenzoic acid; C6H3(OH)2.COOH

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

---
K+ gl NaClO4 25°C 0 C I K1=1.19 1992CRa (54467) 372
K(K+KL)=-0.01
K(K+HL)=0.54
Extrapolated to I=0 form I=0.04 to I=0.81
****
C7H8O3S HL CAS 6192-52-5 (561)
4-Toluenesulfonic acid; CH3.C6H4.SO3H

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con mixed 25°C 20% C I K1=1.95 2001BSa (56119) 373
Medium: 20 % w/w ethylene carbonate/water. Data for 20-80 % w/w ethylene carbonate/water.
****
C8H4O3 L CAS 85-44-9 (4473)
Phthalic anhydride;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq ? 100% U 1971TGa (58396) 374
K(KSCN+L=(KSCN)L)=-0.11
K(2KSCN+L=(KSCN)2L)=0.99
Medium: CH3CN
****
C8H5N5O6 H3L Murexide (453)
Purpuric acid (Murexide is ammonium salt);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 20°C 100% U K1=2.72 1992PSa (58513) 375
Medium: DMF, 0.01 M Me4NI
****
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
---
K+ dis non-aq 25°C 100% C M 2002IIa (58634) 376
K(KL+phen)=3.41
K(KL+2(phen))=5.74
Medium: chlorobenzene. For extraction from 0.10 M KCl:
K(K+HL(o)=KL(o)+H)=-12.21; K(K+HL(o)+phen(o)=KL(phen)(o)+H)=-8.75.

K+ gl alc/w 25°C 100% U I K1=1.6 1965LIa (58635) 377
Medium: MeOH, 0.1 M KI. In EtOH, 0.1 M KSCN: K1=3.2
****
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
-------------------------------------------------------------------------
K+         gl  R4N.X  25°C 0.25M C TIH    K1=0.83        1985DRa (58976) 378
                                          B(KHL)=5.16
0.02-1 M NEt4I. 10-37 C. DH(K1)=1 kJ mol-1, DS=25; DH(KHL)=8, DS=134
-------------------------------------------------------------------------
K+         gl  KNO3   37°C 0.15M C  IH    K1=0.41   B2= 0.19  1983DRb (58977) 379
Method: determination of protonation constant in KNO3 and [Et4N]NO3 media
Data for I=0.0-1.0 M KNO3. At I=0.0, K1=0.76; DH(K1)=3.8 kJ mol-1, DS=26
*************************************************************************
C8H8                    L                    CAS 629-20-9  (2539)
1,3,5,7-Cyclooctatetraene; cyclo(-CH:CH.CH:CH.CH:CH.CH:CH-)
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         nmr non-aq 23°C 100%  U        K1=2.66        1976SCa (59248) 380
*************************************************************************
C8H8O3                 HL    Phenoxyacetic    CAS 122-59-8  (1153)
Phenoxyethanoic acid; C6H5.O.CH2.COOH
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         gl  none   25°C  0.0  C TIH    K1=-0.01       1985CDb (60037) 381
Calculated from protonation data for I=0.04-0.9 M KCl. Data for 10-45 C.
DH(K1)=1.0 kJ mol-1, DS(K1)=4 J K-1 mol-1.
*************************************************************************
C8H9N3O7             H2L    Uramildiacetic   CAS 13055-06-5  (185)
5-Amino-2,4,6-trioxo-1,3-perhydrodiazimino-N,N-diethanoic acid;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         cal R4N.X  20°C  0.1M C                        1976ANb (60633) 382
                                          DH1= -1.67 kJ/mol
in Me4NCl
-------------------------------------------------------------------------
K+         gl  KNO3   39°C 0.10M U TIH    K1=0.70        1963IFb (60634) 383
K1=1.23(20 C),1.00(27 C),0.81(34 C), DH(K1)=-49.3 kJ mol-1, DS=-146 J K-1m-1
At I=0 corr:K1=1.94(20 C)
*************************************************************************
C8H11O2F3              HL                   CAS 22767-90-4  (1249)
1,1,1-Trifluoro-5,5-dimethyl-2,4-hexanedione; F3C.CO.CH2.CO.CH(CH3)3
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         oth diox/w 25°C  75%  U        K1=3.34   B2=7.17   1979MMa (61303) 384
*************************************************************************
C8H12O2                HL    Dimedone         CAS 126-81-8  (1137)
5,5-Dimethyl-1,3-cyclohexanedione;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
```

K+ gl alc/w 25°C 100% U I K1=0.8 1965LIa (61685) 385
Medium: MeOH, 0.1 M KI. In EtOH, 0.1 M KSCN: K1=1.8
****
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
---
K+ ISE alc/w 25°C 100% C I T K1=1.60 B2= 2.10 2003ADa (62670) 386
IUPAC Tentative. Medium: 0-0.1 M. In PC K1=2.08

K+ oth oth/un 25°C U K1=-0.06 2000MTa (62671) 387
Method: capillary zone electrophoresis.
Medium: 0.005 M H3BO3/Me4NOH, pH 9.2.

K+ cal non-aq 25°C 100% C H K1=0.68 B2= 1.18 1996OKa (62672) 388
Medium: DMF, 0.10 M Et4NCl. DH(K1)=-19.5 kJ mol-1, DS(K1)=-52 J K-1 mol-1;
DH(K2)=6, DS(K2)=29.

K+ con alc/w 25°C 100% U I K1=1.408 1995DSb (62673) 389
Medium : MeOH. In MeCN K1=2.231

K+ con non-aq 25°C 100% U K1=3.1 1993EVa (62674) 390
Medium: THF+CHCl3 (4:1 vol)

K+ ISE non-aq 25°C 100% M IH K1=2.02 B2=4.67 1988BUa (62675) 391
Medium: propylene carbonate (also CH3CN), 0.05 M (CH3CH2)4NClO4.
DH(K1)=-14.6, DH(K2)=-8.7 kJ mol-1; DS(K1)=-10.4, DS(K2)=21.5 J K-1 mol-1

K+ con non-aq 25°C 100% C K1=1.73 B2= 2.59 1987ZBb (62676) 392
Medium: MeOH.

K+ nmr alc/w 30°C 100% U K1=1.7 B2=2.4 1983AAa (62677) 393

K+ ISE alc/w 25°C 100% U K1=1.74 1983GGa (62678) 394
Medium: MeOH

K+ gl alc/w 25°C 100% U H T K1=1.59 B2=2.18 1982MRa (62679) 395
Medium: MeOH. DH(K1)=23.0 kJ mol-1

K+ ISE alc/w 25°C 100% U T K1=1.58 B2=1.73 1982MYc (62680) 396
Medium: MeOH

K+ vlt non-aq 25°C 100% U K1=2.15 1980MDa (62681) 397
Medium: propylene carbonate
****
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
---
K+ con non-aq 25°C 100% U I K1=2.4 1993EVa (62986) 398
Medium: THF+CHCl3 4:1(vol). In 100% THF: K1=2.2
****
C8H18O5 L Tetra-Et-Glycol CAS 112-60-7 (5664)
2,2'-(Oxybis(2,2-ethanediyloxy))-bis-ethanol; O(CH2.CH2.O.CH2.CH2.OH)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% C K1=3.7 1992MSe (63003) 399
Medium: 100% MeOH. Anion: picrate. Also data for nitrophenolate anions.
****
C8H20N4 L Cyclen CAS 294-90-6 (10)
1,4,7,10-Tetraazacyclododecane; cyclo(-(NH.CH2.CH2.)4-)

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ EMF non-aq 25°C 100% U I K1=2.90 1996WPa (63293) 400
Medium: acetonitrile, 0.05 M NEt4ClO4. In propylene carbonate K1=4.8; in
dimethylformamide K1<2
****
C8H20O4P2 L CAS 86536-56-3 (2076)
1,2-Bis(2-dimethylphosphinylmethoxy)ethane; Me2P(O)CH2.O.CH2.CH2.O.CH2.P(O)Me2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=3.15 1989KSa (63310) 401
Medium: tetrahydrofuran/CHCl3 4:1 (vol)
****
C9H6O4 HL Ninhydrin CAS 485-47-2 (2536)
1,2,3-Indantrione monohydrate, Trioxohydrindene monohydrate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ nmr non-aq 25°C 100% U I K1=1.85 1976AFa (63951) 402
Medium: Hexamethylphosphoramide. Data also for a variety of mixed media
****
C9H11N3O7 H3L (3877)
N-(1-Methyl-2,4,6-trioxo-perhydropyrimidinyl)iminodiethanoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl R4N.X 20°C 0.10M U K1=1.11 1963IFb (66525) 403
Medium: Me4NNO3
****
C9H11O2F5 HL CAS 2145-68-8 (1251)
1,1,1,2,2-Pentafluoro-6,6-dimethyl-3,5-heptanedione;

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

---
K+ oth diox/w 25°C 75% U K1=3.67 B2=7.30 1979MMa (66535) 404
****
C9H16O2 HL CAS 18362-64-6 (1134)
2,6-Dimethyl-3,5-heptanedione; (CH3)2.CH.CO.CH2.CO.CH(CH3)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl diox/w 30°C 75% U K1=3.86 B2=7.45 1975MMa (67745) 405
****
C9H18O3Si3 L CAS 3091-77-7 (1284)
Trimethyl-triethenyl-cyclotrisiloxane; ((CH3)(CH2:CH)SiO)3

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con alc/w 25°C 100% U K1=<-0.3 1980OPa (67967) 406
Medium: MeOH, 0.1 M Me4NBr
****
C9H20O6Cl2P2 L CAS 19928-93-7 (2633)
Dichloromethylenedi(phosphonic acid diethyl ester); Cl2C(PO.(OC2H5)2)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 22°C 100% U K1=0.88 1981SKd (68122) 407
Medium: CH3CN
****
C10H2O6 L CAS 3308-42-7 (4698)
1,2,4,5-Benzenetetracarboxylic dianhydride;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq ? 100% U 1971TGa (68419) 408
K(KSCN+L)=-0.42
K(2KSCN+L=(KSCN)2L)=0.9
Medium: CH3CN
****
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
---
K+ gl none 25°C 0.0 C 1990CDc (68517) 409
B(KH3L)=14.33
B(K2L)=3.4
B(K2HL)=8.8
B(K2H2L)=12.8
Additional technique: spectrophotometry. Kso(KH3L)=-17.18.

K+ gl R4N.X 25°C 0.25M C I K1=1.20 1990DDb (68518) 410
B(KHL)=6.15

B(KH2L)=9.95
B(KH3L)=12.20
B(K2HL)=5.9
Medium: 0.25 M Et4NI. Data for 0.08-0.99 M. B(K2L)=1.2
****
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
K+	gl	alc/w	25°C	100%	U	I	K1=1.2	1965LIa (70738)	411

Medium: MeOH, 0.1 M KI. In EtOH, 0.1 M KSCN: K1=2.4
****
C10H11O2F7 HL CAS 17587-22-3 (1252)
1,1,1,2,2,3,3-Heptafluoro-7,7-dimethyl-4,6-octanedione;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	oth	diox/w	25°C	75%	U		K1=3.61 B2=7.30	1979MMa (71110)	412

****
C10H13N3O7 H3L (3912)
1,3-Dimethyluramil-N,N-diethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	20°C	0.10M	U		K1=0.94	1963IFb (71805)	413

Medium: Me4NNO3
****
C10H14N5O7P H2L AMP-5 CAS 18422-05-4 (842)
Adenosine-5'-monophosphoric acid, 5-Adenylic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	C	TI R	K1=0.70	1991SMa (72455)	414

IUPAC evaluation. 37 C, 0.15 NaCl: K1=0.36

K+	ISE	oth/un	25°C	0.0	C		K1=1.91	1976KRb (72456)	415

Method: K ion selective electrode. Self medium, pH 9.1.
****
C10H15N5O10P2 H3L ADP CAS 20398-34-9 (2181)
Adenosine-5'-diphosphoric acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	C	TI R	K1=1.00	1991SMa (72985)	416

IUPAC evaluation

K+	ISE	oth/un	25°C	0.20M	U		K1=0.67	1954MEa (72986)	417

****
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
K+	gl	R4N.X	25°C	0.15M	M		K1=1.60		1993CRa (73889)	418
							K(KL+H)=10.32			
							K(KHL+H)=6.05			

Medium: 0.15 M Me4NCl.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	gl	mixed	25°C	0.10M	U		K1=1.41		1991SBa (73890)	419

Medium: 0.34 mol parts CH3CN/H2O, 0.1 M R4NX

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	gl	KNO3	25°C	0.10M	C	TIH	K1=0.80		1985DRb (73891)	420

Data at 10-45 C and I=0.02-1.0 M in KNO3. DH(K1)=5 kJ mol-1; DS=30.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	U	I T	K1=0.55		1968WSa (73892)	421

Medium: (CH3)4NCl. I=1.0: K1=0.69

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	gl	oth/un	25°C	0.32M	U		K1=0.96		1965BCa (73893)	422
							K(K+HL)=-0.31			

Medium: CsCl

****

C10H16N5O13P3 H4L ATP CAS 56-65-5 (403)

Adenosine-5'-triphosphoric acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	C	IH R	K1=1.17		1991SMa (74741)	423

IUPAC evaluation. DH(K1)=1.3 kJ mol-1 (tentatitive)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	gl	oth/un	25°C	0.25M	U	H	K1=1.20		1986RSa (74742)	424
							B(KHL)=6.58			
K+	gl	R4N.X	25°C	0.10M	U	H	K1=1.42		1981CMd (74743)	425

Method: effect of Na on ligand protonation.
By calorimetry, DH(K1)=1.3 kJ mol-1, DS(K1)=33 J K-1 mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	ISE	oth/un	25°C	0.01M	U		K1=1.95		1971MEb (74744)	426
K+	ISE	oth/un	25°C	0.0	U		K1=2.35		1970MRb (74745)	427

Method: K-glass electrode. Using a valinomycin electrode, K1=2.34

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	ISE	oth/un	25°C	0.0	U		K1=2.34		1970RMb (74746)	428
K+	gl	oth/un	25°C	0.32M	U		K1=0.9	B2=0.70	1965BCa (74747)	429
							K(K+HL)=-0.3			

Medium: CsCl

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	ISE	oth/un	25°C	0.20M	U		K1=0.99		1954MEa (74748)	430

****

C10H17N5O16P4 H5L AQP CAS 1062-98-2 (3341)
Adenosine-5'-tetraphosphoric acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	C	T	K1=1.54		1991SMa (75158)	431

IUPAC evaluation

****

C10H18O6 L 2-Oxo15-crown-5 CAS 73349-22-1 (609)
1,4,7,10,13-Pentaoxacyclopentadecan-2-one;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=2.12		1982MKa (75609)	432

Medium: MeOH

****

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
K+	ISE	alc/w	25°C	100%	C	IH T	K1=3.5	B2= 6.00	2003ADa (76006)	433

IUPAC Tentative. Medium: 0-0.1 M various. DH(K1)=-32.4 kJ mol-1.
In H2O: K1=0.75, DH(K1)=-17.2. In PC: K1=3.6

K+	sp	non-aq	25°C	100%	C		K1=3.80		2002NMa (76007)	434

Medium: THF, using metal picrate salt.

K+	oth	oth/un	25°C		U		K1=0.53		2000MTa (76008)	435

Method: capillary zone electrophoresis.
Medium: 0.005 M H3BO3/Me4NOH, pH 9.2.

K+	con	non-aq	25°C	100%	C	H	K1=3.90	B2= 5.55	1999WBa (76009)	436

Medium: N,N-dimethylformamide. By calorimetry: DH(K1)=-24.0 kJ mol-1,
DH(K2)=-27.7 kJ mol-1.

K+	vlt	non-aq	25°C	100%	C	I	K1=4.4		1999WKb (76010)	437

Medium: acetonitrile, 0.10 M Et4NClO4. Also data for TMS, propylene
carbonate, acetone, formamide, DMF, DMA, DMSO, MeOH, EtOH.

K+	ISE	alc/w	25°C	100%	U	H	K1=3.40	B2= 5.83	1998SSf (76011)	438

Medium: 100% MeOH, 0,05 M Et4NI

K+	con	alc/w	25°C	100%	U	I	K1=2.385		1995DSb (76012)	439

Medium : MeOH. In MeCN K1=3.670

K+	cal	non-aq	25°C	100%	M	H	K1=4.26		1994BCd (76013)	440

Medium: acetone. DH(K1)=-26.9 kJ mol-1, TDS=-2.7

K+	ISE	non-aq	25°C	100%	M	IH	K1=3.78	B2=6.62	1988BUa (76014)	441

Medium: propylene carbonate (also CH3CN), 0.05 M (CH3CH2)4NClO4.
DH(K1)=-30.5, DH(K2)=-29.5 kJ mol-1; DS(K1)=-30.2, DS(K2)=-44.9 J K-1 mol-1

K+ cal non-aq 25°C 100% C H K1=4.33 1988BUb (76015) 442
Medium: acetonitrile. DH(K1)=-32.0 kJ mol-1, DS(K1)=-25 J K-1 mol-1.

K+ con non-aq 25°C 100% C T K1=4.0 1988TKa (76016) 443
Medium: MeCN

K+ ISE alc/w 25°C 90% U K1=3.00 B2=5.24 1987KHa (76017) 444
Medium: 90% w/w MeOH/H2O

K+ con non-aq 25°C 100% C I K1=3.38 B2= 6.00 1987ZBb (76018) 445
Medium: MeOH. In 70% w/w MeOH/H2O, K1=2.79, K2=2.04.

K+ ISE alc/w 25°C 100% U K1=3.35 B2=5.97 1984IEa (76019) 446
Medium: MeOH

K+ ISE non-aq 25°C 100% M K1=3.34 1984NMb (76020) 447
Medium: MeOH.

K+ ISE alc/w 25°C 100% U K1=3.43 1983GGa (76021) 448
Medium: MeOH

K+ gl alc/w 25°C 100% M H T K1=3.61 1982MRa (76022) 449
Medium: MeOH. DH(K1)=-32.1 kJ mol-1

K+ ISE alc/w 25°C 100% U T K1=3.34 B2=5.55 1982MYc (76023) 450
Medium: MeOH

K+ ISE alc/w 25°C 100% C K1=3.1 B2=6.0 1981PTa (76024) 451
Medium: MeOH

K+ con non-aq 25°C 100% U K1=2.98 1980HNa (76025) 452
Medium: MeCN

K+ cal alc/w 25°C 100% U H T K1=3.77 B2=6.48 1980LIa (76026) 453
Medium: MeOH. DH(K1)=-32.2 and DH(K2)=-33.9 kJ mol-1.

K+ dis non-aq 25°C 100% U K1=3.4 1980TYa (76027) 454
Medium: propylene carbonate

K+ EMF oth/un 25°C var C T K1=0.76 1979HRa (76028) 455
Method: ISE based on cation exchange membrane. Medium: aqueous,
containing 0.06-0.25 m ligand.

K+ oth oth/un 25°C ? U K1=0.74 1977RLa (76029) 456
Method: ultrasound absorption

K+ cal oth/un 25°C 0.10M U H T K1=0.74 1976ITb (76030) 457

DH=-17.0 kJ mol-1.

****

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
K+	cal	non-aq	25°C	100%	M	H	K1=2.61	1994BCd (76319)	458

Medium: acetone. DH(K1)=-0.9 kJ mol-1, TDS=13.9

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	20°C	100%	U		K1=2.5	1992PSa (76320)	459

Medium: DMF, 0.01 M Me4NI

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	non-aq	25°C	100%	M	H	K1=2.25	1988BUa (76321)	460

Medium: propylene carbonate, 0.05 M (CH3CH2)4NClO4. DH(K1)=-7.7 kJ mol-1; DS(K1)=17.1 J K-1 mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	non-aq	25°C	100%	U	H	K1=2.11	1986BUb (76322)	461

In CH3CN. DH=-10.8 kJ mol-1

****

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
K+	dis	non-aq	25°C	100%	C		K1=5.57	1998KSc (76450)	462

Medium: 1,2-dichloroethane.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U	I	K1=3.1	1993EVa (76451)	463

Medium: THF+CHCl3 4:1(vol). In 100% THF: K1=3.0

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	C		K1=3.7	1992MSe (76452)	464

Medium: 100% MeOH. Anion: picrate. Also data for nitrophenolate anions.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	non-aq	25°C	100%	U	IH	K1=1.68	1991TNa (76453)	465

Medium: MeOH. DH(K1)=-26.9 kJ mol-1; TDS=-17.6. In MeCN: K1=2.06

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=1.72	1975CJa (76454)	466

Medium: MeOH

****

C10H22O6 L Penta-Et-Glycol CAS 4792-15-8 (5466)
1,14-Dihydroxy-3,6,9,12,-Tetraoxatetradecane; HO.(CH2.CH2.O)4.CH2.CH2.OH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	alc/w	25°C	90%	U	IH	K1=1.91	1982HLa (76481)	467

Medium: 90% w/w MeOH/H2O. DH=-19.1 kJ mol-1, DS=-8.20 J K-1 mol-1

****

C11H6O10 H5L (6712)
Benzenepentacarboxylic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl KCl 25°C 0.30M U K1=2.98 1991RSa (76885) 468
B(K2L)=4.56
B(K+HL)=2.21
B(K+H2L)=1.36
K(K+H3L)=0.61
K(K+H4L)=0.26, K(2K+HL)=2.1
****
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
---
K+ oth R4N.X 25°C 0.50M U K1=0.91 1971CSb (79299) 469
K(K+H2L)=0.79
Method: polarimetry. Medium: Me4NOH

K+ nmr oth/un 35°C ? U T K1=0.75 1968SSa (79300) 470
K1(100 C)=0.18

K+ nmr oth/un 100°C 0.50M U K1=0.1 1968SSc (79301) 471
Medium: K4L
****
C11H18O7 HL (6800)
1,4,7,10,13-Pentaoxacyclohexdecan-14,16-dione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ kin alc/w ? 76% U K1=0.78 1991HHb (79671) 472
Medium: 76% w/w EtOH/H2O
****
C11H20O2 HL Dipivaloylmeth. CAS 1118-71-4 (363)
2,2,6,6-Tetramethyl-3,5-heptanedione; (CH3)3C.CO.CH2.CO.C(CH3)3

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl diox/w 30°C 75% U K1=3.89 1975MMa (79749) 473
****
C11H22O5 L 16-Crown-5 CAS 55477-28-8 (1592)
1,4,7,10,13-Pentaoxacyclohexadecane; cyclo(-(O.CH2.CH2)5.CH2.CH2-)

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis none 25°C 0.0 U 1991IOa (79854) 474
Keff=3.60
By solvent extraction of the metal picrate into dichloromethane.

K+ ISE none 25°C 0.0 C K1=0.40 1991TKa (79855) 475

Self medium (ca. 0.008M). Method: K ion-selective electrode.

K+ dis none 25°C 0.0 C M 1989TKc (79856) 476
K(KL+A=KAL(org))=1.63
Method: extraction of metal picrate/L from H2O into benzene.
K(K+HA(org)+L(org)=KAL(org)+H)=0.041. HA is picric acid.

K+ con non-aq 25°C 100% C I K1=3.6 1988TKa (79857) 477
Medium: MeCN. In propylene carbonate K1=3.2; in MeOH 2.9

****

C11H22O6 L CAS 69496-26-0 (1663)
1,4,7,10,14-Pentaoxacyclohexadecan-12-ol, Hydroxy-16-crown-5

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=2.53	1983IKa	(79878) 478

****

C12H5N5O9S HL CAS 27050-59-3 (4943)
1,3,7,9-Tetranitrophenothiazine-5-oxide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	dis	oth/un	25°C	var	U		K1=1.11	1972IWb	(80064) 479
K+	con	non-aq	25°C	100%	U		K1=1.67	1972IWb	(80065) 480

Medium: nitrobenzene.

****

C12H5N7O12 L Dipicrylamine CAS 131-73-7 (1942)
Di(2,4,6-trinitrophenyl)amine; HN(C6H2(NO2)3)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	dis	non-aq	25°C	100%	C		K1=4	1998KSc	(80073) 481

Medium: 1,2-dichloroethane.

K+	sp	non-aq	20°C	100%	U		K1=4.9	1978JId	(80074) 482

Medium: CH2Cl2

K+	dis	oth/un	25°C	var	U		K1=2.05	1972IWb	(80075) 483
K+	con	non-aq	25°C	100%	U		K1=1.51	1972IWb	(80076) 484

Medium: nitrobenzene

K+	dis	oth/un	25°C	var	U		K1=1.9	1970SSb	(80077) 485

Method: paper chromatography

****

C12H6O3 L CAS 81-84-8 (4892)
1,8-Naphthalenedicarboxylic anhydride;

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

```
---------------------------------------------------------------------------
K+         sp  non-aq   ?  100%  U                      1971TGa (80101) 486
                                        K(KSCN+L)=-0.25
                                        K(2KSCN+L)=0.95
Medium: CH3CN
***************************************************************************
C12H6O12              H6L    Mellitic acid      (7400)
Benzenehexacarboxylic acid; (C(COOH))6
---------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
---------------------------------------------------------------------------
K+         ISE R4N.X  25°C    0  C  I     K1=3.42        1996RSb (80112) 487
                                        B(NaHL)=10.31
                                        B(NaH2L)=16.41
                                        B(NaH3L)=20.93
                                        B(NaH4L)=23.66
B(K2L)=4.65, B(K2HL)=12.36, B(K2H2L)=17.60, B(K2H3L)=20.93
B(K3L)=7.35,B(K3HL)=13.10, B(K4L)=7.33. I=0-3 M Et4NI etc.
***************************************************************************
C12H16O4                L                      CAS 25887-95-6  (686)
2,3-Benzo-1,4,7,10-tetraoxacyclododeca-2-ene;
---------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
---------------------------------------------------------------------------
K+         cal non-aq 25°C 100%  U   H    K1=1.76        1989SSd (81673) 488
Medium: CH3CN
---------------------------------------------------------------------------
K+         cal non-aq 25°C 100%  U   H    K1=1.76   B2=2.84   1988SSc (81674) 489
Medium: MeCN
***************************************************************************
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
---------------------------------------------------------------------------
K+         oth R4N.X  25°C 0.50M U        K1=1.56        1973CSa (82310) 490
Method: polarimetry. Medium: Me4NCl
***************************************************************************
C12H20O4P2              L                      CAS 82154-47-0  (2915)
1,2-Di((2-dimethylphosphinyl)methoxy)benzene; C6H4(OCH2PO(CH3)2)2
---------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
---------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=2.54        1982YSa (82641) 491
Medium: tetrahydrofuran+CHCl3 4:1(vol); M is 2,4-dinitrophenolate
***************************************************************************
C12H20O8                L                      CAS 62796-84-3  (2141)
1,4,7,10,13,16-Hexaoxacyclooctadecane-2,6-dione;
---------------------------------------------------------------------------
```

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         cal alc/w  25°C 100%  U   H    K1=2.79        1980BMa (82652) 492
Medium: MeOH. DH=-24.6 kJ mol-1.
-------------------------------------------------------------------------
K+         cal alc/w  25°C 100%  U   H    K1=2.79        1980LIb (82653) 493
Medium: MeOH. DH=-24.6 kJ mol-1.
-------------------------------------------------------------------------
K+         cal alc/w  25°C 100%  U   H    K1=2.79        1977ILa (82654) 494
Medium: MeOH. DH(K1)=-24.6 kJ mol-1
*************************************************************************
C12H20O8               L                      CAS 62796-83-4  (611)
2,11-Dione-18-crown-6, 1,4,7,10,13,16-hexaoxacyclooctadecan-2,6-dione;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U        K1=2.70        1982MKa (82660) 495
Medium: MeOH
*************************************************************************
C12H22O2              HL                      CAS 93269-15-9  (1250)
2,2,4,6,6-Pentamethyl-3,5-heptanedione; (CH3)3C.CO.CH(CH3).CO.C(CH3)3
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         oth diox/w 25°C  75%  U        K1=3.58   B2=7.22   1979MMa (82858) 496
*************************************************************************
C12H22O7               L    2-Oxa18-crown-6  CAS 73349-23-2  (610)
1,4,7,10,13,16-Hexaoxacyclooctadecan-2-one;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U        K1=4.18        1982MKa (82862) 497
Medium: MeOH
*************************************************************************
C12H23NO5              L                       (6793)
10-Methoxycarbonylethyl-1,4,7-trioxa-10-azacyclododecane;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         cal alc/w  25°C 100%  U   H                   1990KMb (82945) 498
Medium: MeOH.  DH=-13.1 kJ mol-1
*************************************************************************
C12H24N2O6             L                      CAS 57721-99-0  (2508)
1,14-Diacetamido-3,6,9,12-tetraoxatetradecane; (CH2.O.CH2.CH2.O.CH2.CH2.CO.NH2)2
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U        K1=1.17        1975CJa (83052) 499
Medium: MeOH
*************************************************************************
```

C12H24O4S2 L CAS 296-39-9 (4938)
1,4,10,13-Tetraoxa-7,16-dithiacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ EMF alc/w 25°C 100% A K1=1.15 1971FRa (83138) 500
Medium: MeOH
****
C12H24O5S L Thia-18-crown-6 CAS 52559-79-2 (2263)
1-Thia-4,7,10,13,16-pentaoxacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% U H K1=3.61 1980LIa (83155) 501
Medium: MeOH. DH=-37.7 kJ mol-1.
****
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
---
K+ cal R4N.X 25°C 0.10M C TIH K1=2.04 2004WTa (83372) 502
Medium: 0.1 M Et4NCl. Also data for 0.043-0.759 mol fraction acetonitrile/
H2O, and for 20 and 30 C. DH(K1)=-26.2 kJ mol-1, DS(K1)=-48.8 J K-1 mol-1.

K+ EMF alc/w 25°C 100% C K1=5.06 2004ZTa (83373) 503
Medium: 100% methanol, 0.05 M Bu4NClO4. Method: Ag electrode,
competition with Ag+ ion.

K+ ISE alc/w 25°C 100% C IH R K1=6.11 2003ADa (83374) 504
IUPAC Recommended. Medium: 0-0.1 M various. DH(K1)=-55.3 kJ mol-1
In H2O: K1=2.05, DH(K1)=-25.0. In PC K1=6.2, DH(K1)=-46

K+ dis oth/un 25°C dil C 2002KCa (83375) 505
KL extracted from Li acetate buffer into benzene in the presence of
bromocresol green, HA. K(K+L(org)+A=KLA(org))=6.68.

K+ ISE mixed 25°C 0.8M U TI K1=3.63 2002ZRa (83376) 506
in H2O K1=1.64
Medium: 0.8 mass parts n-Propanol in H2O;for 0.2 m.p. PrOH/H2O K1=2.15;
for 0.6 m. p. PrOH/H2O K1=2.75; K-selective electrode; also data for 45 C

K+ gl mixed 25°C 1.0M U I K1=5.65 2001ZKb (83377) 507
in 100% H2O K1=2.04
Medium: 1.0 mass parts CH3CN;
for 0.6 m.p. CH3CN/H2O K1=3.41; for 0.2 m.p. K1=2.41

K+ sp non-aq 25°C 100% C K1=4.8 2000KBb (83378) 508
Medium: MeCN. Method: electrospray ionization mass spectrometry.

K+ dis non-aq 25°C 100% U K1=11.21 2000KSa (83379) 509
Medium: 1,2-dichloroethane

K+ oth oth/un 25°C U K1=1.90 2000MTa (83380) 510
K(KL+picrate)=0.41
Method: capillary zone electrophoresis.
Medium: 0.005 M H3BO3/Me4NOH, pH 9.2.

K+ con non-aq 25°C 100% C TIH K1=6.31 1999RMb (83381) 511
Medium: 100% MeOH. Data for 15-55 C. Also data for DMF/MeOH mixtures.
DH(K1)=-56.0 kJ mol-1, DS(K1)=-67.9 J K-1 mol-1. In 100% DMF, K1=4.28.

K+ cal non-aq 25°C 100% C H K1=4.47 1999WBa (83382) 512
Medium: N,N-dimethylformamide. DH(K1)=-38.1 kJ mol-1.

K+ gl mixed 25°C 20% U TI K1=2.33 1998KBa (83383) 513
Medium: 20% w/w acetone/H2O. In 40% K1=2.95; in 60% K1=3.50;
In 80%, K1=4.36. Also data for 10, 15, 35 and 40 C

K+ ISE alc/w 25°C C TI K1=3.86 1998KBb (83384) 514
Medium 60% mass MeOH in H2O; also for 0% K1=2.10; for 100% K1=6.43
Method: gl. electrode, reversible to K+; for 55 C, 60% K1=3.26;

K+ ISE alc/w 25°C 100% U I K1=6.22 1998SSf (83385) 515
Medium: 100% MeOH, 0,05 M Et4NI.

K+ dis non-aq 25°C 100% C I 1998TKa (83386) 516
K(K+A+L(org)=KAL(org))=6.78
Method: Extraction from aqueous phase (I<0.03, pH 10.6-11.8) into
dichloromethane. Data for many non-aqueous phases. HA is picric acid.

K+ cal non-aq 25°C 100% C K1=6.11 1997DZa (83387) 517
Medium: benzonitrile. DH(K1)=-54.70 kJ mol-1, DS(K1)=-66.5 J K-1 mol-1.

K+ oth non-aq 15°C 100% U T H K1=4.70 1997EKa (83388) 518
Medium: CH3CN. Also data for H2O/CH3CN mixtures. For 40% CH3CN w/w K1=3.14;
for 100% H2O: K1=2.17

K+ con non-aq 25°C 100% C T H K1=5.72 1997TAa (83389) 519
Medium: acetonitrile. DH(K1)=-43.6 kJ mol-1, DS(K1)=-36.6 J K-1 mol-1.
Data for 10-25 C.

K+ cal R4N.X 25°C 0.10M C H T K1=2.27 1996BCh (83390) 520
Medium: 0.10 M Et4NClO4. DH(K1)=-15.4 kJ mol-1.

K+ EMF alc/w 25°C U TIH K1=3.80 1996DBa (83391) 521
K1=2.04 (100%H2O)
80% mass 2-propanol /H2O; also for T=10 C K1=3.86; for T=45 C K1=3.73

K+ ISE R4N.X 25°C 0.03M U H K1=1.98 1996SSb (83392) 522

Method: K-selective electrode; in 0.025 M Me4NCl
DH1=-24.7 kJ/mol

K+ ISE non-aq 25°C 0.03M U H K1=4.92 1996SSb (83393) 523
Method: K-selective electrode; Medium: 0.025 M Me4NCl in isopropanol
DH1=-68.1 kJ/mol

K+ ISE non-aq 25°C 0.03M U H K1=5.52 1996SSb (83394) 524
Method: K-selective electrode; Medium: 0.025 M Me4NCl in MeCN
DH1=-15.9 kJ/mol

K+ ISE non-aq 25°C 0.03M U H K1=4.19 1996SSb (83395) 525
Medium: 0.025 M Me4NCl in N,N-dimethylformamide
Method: K-selective electrode; DH1=-36.8 kJ/mol

K+ ISE non-aq 25°C 0.03M U H K1=3.24 1996SSb (83396) 526
Medium: 0.025 M Me4NCl in hexamethylphosphoric triamide
Method: K-selective electrode; DH1=-37.4 kJ/mol

K+ ISE non-aq 25°C 0.03M U H K1=3.35 1996SSb (83397) 527
Medium: 0.025 M Me4NCl in DMSO
Method: K-selective electrode; DH1=-27.6 kJ/mol

K+ ISE mixed 25°C 0.03M U IH K1=2.47 1996SSb (83398) 528
Medium: 0.025 M Me4NCl in H2O/dioxane 2:8 v/v; for 8:2 K1=4.21
Method: K-selective electrode; DH1=-24.7 kJ/mol

K+ vlt non-aq 25°C 100% C K1=9.3 1995KTb (83399) 529
Method: ion transfer polarography. Medium: nitrobenzene, 0.05 M
tetrabutylammonium tetraphenylborate.

K+ cal alc/w 25°C 80% C H K1=4.70 1995KZa (83400) 530
Medium: 80% v/v CH3OH/H2O. DH(K1)=-45.3 kJ mol-1, DS(K1)=-62.1 J K-1 mol-1

K+ cal non-aq 25°C 100% U IH T K1=5.73 1995OKb (83401) 531
Medium: Acetonitrile, 0.1 M Et4NClO4. DH(K1)=-17 kJ mol-1
In propylene carbonate K1=6.24, DH(K1)=-47

K+ cal KCl 25°C 0.00 C T H K1=2.06 1995WIa (83402) 532
Method: isothermal flow calorimetry. Measurements at 1.52 MPa. Data for
50-125 C. Medium: 0.005 m KCl. DH(K1)=-26.0 kJ mol-1, DS(K1)=-48 J K-1 m-1

K+ cal non-aq 25°C 100% M H K1=5.89 1994BCd (83403) 533
Medium: acetone. DH(K1)=-50.4 kJ mol-1, TDS=-15.4

K+ cal non-aq 25°C 100% U H T K1=4.21 1994OOa (83404) 534
Medium: DMF, 0.1 M Et4NClO4. DH(K1)=-38.8 kJ mol-1, DS=-50 J K-1 mol-1

K+ dis non-aq 25°C 100% U 1993INa (83405) 535
B(KPL)=6.20

K is the equilibrium constant for extraction of the metal picrate (P) into CH2Cl2. For extraction from D2O, B=6.38

K+ EMF oth/un 25°C 0.05M M K1=6.15 1992BUb (83406) 536
K1=6.29 (by calorimetric competitive titration)

K+ cal R4N.X 25°C 0.10M C H K1=2.04 1992OIa (83407) 537
DH(K1)=-26.3 kJ mol-1, DS=-49 J K-1 mol-1

K+ cal none 45°C 0.0 U H K1=1.77 1992VOa (83408) 538
DH(K1)=-22.3 kJ mol-1, DS=-36.1 J K-1 mol-1

K+ ix none 25°C 0.0 U I K1=1.8 1991BMb (83409) 539
Ligand bound to silica gel. In MeOH:K=3.8, in EtOH:K=4.0, in acetone, K=4.0

K+ nmr oth/un 30°C dil C K1=2.470 B2= 5.64 1991ERa (83410) 540
B(K2L2)=9.435
B(K2L3)=12.474
B(K3L3)=16.889
Medium: D2O. Method: 13C nmr.

K+ ISE alc/w 25°C 70% C K1=3.71 B2= 5.71 1991GTa (83411) 541
Medium: 70% v/v MeOH/H2O, 0.10 M Bu4NI. Method of corresponding solutions.

K+ ix alc/w RT 50% C K1=3.38 1990MBb (83412) 542
Medium: 50% v/v MeOH/H2O.

K+ con non-aq 25°C 100% C M K1=6.013 1990SAb (83413) 543
K(KSCN+L)=4.33
K(KL+SCN)=-0.947
Medium: propylene carbonate.

K+ oth non-aq 25°C 100% C K1=4.65 1989BBh (83414) 544
Method: FABMS. Medium: glycerol.

K+ ISE non-aq 25°C 100% M H K1=6.08 1988BUa (83415) 545
Medium: propylene carbonate, 0.05 M (CH3CH2)4NClO4. DH(K1)=-45.4 kJ mol-1; DS(K1)=-36.6 J K-1 mol-1

K+ cal non-aq 25°C 100% C H K1=5.72 1988BUb (83416) 546
Medium: acetonitrile. DH(K1)=-9.9 kJ mol-1, DS(K1)=75.8 J K-1 mol-1.

K+ ISE alc/w 25°C 90% U K1=5.50 1987KHa (83417) 547
Medium: 90% w/w MeOH/H2O

K+ ix KCl 25°C 0.05M C K1=2.03 1987MGb (83418) 548
Medium: KCl/HCl.

K+ con none 25°C 0.0 C T H K1=2.034 1985TAa (83419) 549
Data for 10-45 C. DH(K1)=-25.01 kJ mol-1, DS(K1)=-44.34 J K-1 mol-1.

K+ ISE non-aq 25°C 100% M K1=6.02 1984NMb (83420) 550
Medium: MeOH.

K+ oth oth/un RT 0.01M C K1=2.02 1984STb (83421) 551
Method: isotachophoresis. Medium: 0.01 M Bu4NCl or 0.01 M Tris.

K+ ISE alc/w 25°C 100% U K1=6.08 1983GGa (83422) 552
Medium: MeOH

K+ con alc/w 25°C 100% U K1=6.20 1983LSa (83423) 553

K+ sol non-aq 20°C 100% C K1=5.70 1983SLa (83424) 554
Medium: CHCl3

K+ cal alc/w 25°C 90% U IH K1=5.35 1982HLa (83425) 555
Medium: 90% MeOH. DH=-49.28 kJ mol-1, DS=-18.7 J K-1 mol-1

K+ ISE alc/w 25°C 100% U K1=6.02 1982MKa (83426) 556
Medium: MeOH

K+ gl alc/w 25°C 100% M H T K1=6.18 1982MRa (83427) 557
Medium: MeOH. DH(K1)=-53.1 kJ mol-1

K+ ISE alc/w 25°C 100% C K1=5.93 1981PTa (83428) 558
Medium: MeOH

K+ sp diox/w 25°C 100% U M 1981SSd (83429) 559
K(K(Picrate)+L)=6.0

K+ cal alc/w 25°C 100% U H K1=6.06 1980BMa (83430) 560
Medium: MeOH. DH=-56.1 kJ mol-1.

K+ cal alc/w 25°C 100% U H T K1=6.06 1980LIa (83431) 561
Medium: MeOH. DH=-56.1 kJ mol-1.

K+ ISE alc/w 25°C 90% C K1=5.23 1980LVb (83432) 562
Method: K ion selective glass electrode. Medium: 90% v/v MeOH/H2O, 0.10 M Me4NBr. Also data for MeNH3+, EtNH3+ and C6H5.(CH2)2NH3+ cations.

K+ dis non-aq 25°C 100% U K1=6.2 1980TYa (83433) 563
Medium: propylene carbonate

K+ oth alc/w 25°C 100% U K1=6.15 1980WJa (83434) 564
Method: fluorimetry in CH3OH

K+ EMF oth/un 25°C var C T K1=2.05 1979HRa (83435) 565
Method: ISE based on cation exchange membrane. Medium: aqueous, containing 0.06-0.25 m ligand.

```
K+         oth KCl    25°C  var  U   H    K1=2.04        1979JLa (83436) 566
From heat capacity measurements, 0.02 - 0.4 M KCl. DH(K1)=-26 kJ mol-1
--------------------------------------------------------------------------
K+         cal alc/w  25°C 100%  U   H    K1=6.05        1977ILa (83437) 567
Medium: MeOH. DH(K1)=-56.1 kJ mol-1
--------------------------------------------------------------------------
K+         cal alc/w  25°C  70%  U   H    K1=4.33        1976ITa (83438) 568
Medium: 70% w/w MeOH/H2O. DH(K1)=-40.5 kJ mol-1.
--------------------------------------------------------------------------
K+         cal oth/un 25°C 100%  U   H  T K1=2.03        1976ITb (83439) 569
DH=-26.0 kJ mol-1
--------------------------------------------------------------------------
K+         kin none   25°C  0.0  U        K1=3.4         1976LFa (83440) 570
--------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  A        K1=6.10        1971FRa (83441) 571
Medium: MeOH.  In H2O: K1=2.06
**************************************************************************
C12H25NO5              L                      CAS 33941-15-0  (4939)
1,4,7,10,13-Pentaoxa-16-azacyclooctadecane;
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
K+         cal alc/w  25°C 100%  U  IH    K1=3.78        1998SSf (83705) 572
Medium: 100% MeOH, 0,05 M Et4NI. DH(K1)=-22.0 kJ mol-1
--------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  A        K1=3.90        1971FRa (83706) 573
Medium: MeOH
**************************************************************************
C12H26NO2P             L                        (7849)
N,N-Diethylcarbamoylmethyl-(dipropylphosphineoxide;
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
K+         con non-aq 25°C       C        K1=2.5         1999ESa (83719) 574
In tetrahydrofuran; alkali metal is used as 2,4-dinitrophenolate
**************************************************************************
C12H26N2O4             L                        (6933)
1,4-Diaza-7,10,13,16-tetraoxacyclooctadecane;
--------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------
K+         cal alc/w  25°C 100%  U   H    K1=2.31        1994IZa (83731) 575
Medium: MeOH. DH(K1)=-28.9 kJ mol-1, DS(K1)=-52.7 J K-1 mol-1
**************************************************************************
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
--------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U  I     K1=1.76        1998SSf (83846) 576
```

Medium: 100% MeOH, 0,05 M Et4NI. Many other crown ethers studied
---
K+ cal non-aq 25°C 100% M H K1=3.85 1994BCd (83847) 577
Medium: acetone. DH(K1)=-16.1 kJ mol-1, TDS=5.8

K+ sp non-aq 20°C 100% U K1=2.82 1992PSa (83848) 578
Medium: DMF, 0.01 M Me4NI

K+ ISE non-aq 25°C 100% C K1=<2 1989MGa (83849) 579
Medium: DMF, 0.10 M Et4NClO4

K+ ISE non-aq 25°C 100% M H K1=4.43 1988BUa (83850) 580
Medium: propylene carbonate, 0.05 M (CH3CH2)4NClO4. DH(K1)=-21.9 kJ mol-1; DS(K1)=11.0 J K-1 mol-1

K+ cal non-aq 25°C 100% U H K1=4.13 1986BUb (83851) 581
In CH3CN. DH=-15.3 kJ mol-1

K+ cal alc/w 25°C 100% U H K1=1.83 1986BUd (83852) 582
In MeOH. DH=-4.7 kJ mol-1

K+ sol non-aq 20°C 100% C K1=5.11 1983SLa (83853) 583
Medium: CHCl3

K+ con non-aq 25°C 100% U K1=4.32 1980KMb (83854) 584
Medium: MeCN

K+ ISE alc/w 25°C 100% A K1=2.04 1971FRa (83855) 585
Medium: MeOH
****
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
---
K+ con non-aq 25°C 100% U K1=4.1 1993EVa (84001) 586
Medium: THF+CHCl3 (4:1 vol). Also data for other solvents

K+ cal oth/un 25°C 0.05M M K1=2.07 1992BUb (84002) 587
K1=2.40 (by conductivity)

K+ cal mixed 25°C 90% U IH K1=1.95 1982HLa (84003) 588
Medium: 90% MeOH. DH=-29.3 kJ mol-1, DS=-18.2 J K-1 mol-1

K+ ISE alc/w 25°C 100% U K1=2.20 1975CJa (84004) 589
Medium: MeOH

K+ ISE alc/w 25°C 100% A K1=2.20 1971FRa (84005) 590
Medium: MeOH
****

C12H27N3O3 L THETAC (7199)
1,4,7-Tris(hydroxyethyl)-1,4,7-triazacyclononane

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	EMF	non-aq	25°C	100%	C		K1=3.23	1997WWa (84087)	591

Medium: MeOH, 0.05M Et4NClO4.
Method: Ag/Ag+ electrode; by competition with Ag+.

****

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
K+	gl	NaClO4	25°C	0.20M	U		K1=0.8	1980KKb (84336)	592

****

C12H32N4O12P4 H8L DOTPH CAS 91987-74-5 (229)
1,4,7,10-Tetraazacyclododecane-N,N',N",N"'-tetramethylenephosphonic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	M			1990DSa (84412)	593
							B(KHL)=15.98		
							B(KH2L)=27.49		
							B(KH3L)=36.36		
							B(KH4L)=43.79		

Medium: Me4NNO3

****

C13H20N2O8 H4L CAS 123064-92-6 (7929)
trans-1,3-Cyclopentanediaminotetraethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	KCl	25°C	1.0M	U		K1=0.90	1989CMb (86122)	594

****

C13H20O5 L (2511)
1-Hydroxy-2-(1,4,7,10-tetraoxaundecyl)benzene; HO.C6H4.O.(CH2.CH2.O)3.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=1.45	1975CJa (86148)	595

Medium: MeOH

****

C13H22O8 L CAS 58484-46-1 (2140)
1,5,8,11,14,17-Hexaoxacyclononadecane-2,4-dione;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	kin	alc/w	?	76%	U	I	K1=1.91	1991HHb (86377)	596

Medium: 76% w/w EtOH/H2O. Also data for 65, 54 and 39% w/w ethanol/H2O:

K1=1.69, 1.49 and 1.11 respectively.

K+ cal alc/w 25°C 100% U H K1=2.55 1980LIb (86378) 597
Medium: MeOH. DH=-33.1 kJ mol-1.

K+ cal alc/w 25°C 100% U H K1=2.55 1977ILa (86379) 598
Medium: MeOH. DH(K1)=-33.1 kJ mol-1
****
C13H24O7 L CAS 76377-06-5 (612)
3-Methyl-11,4,7,10,13,16-hexaoxacyclooctadecan-2-one, 3-Methyl-2-one-18-crown-6;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=4.05 1982MKa (86426) 599
Medium: MeOH
****
C13H26O5 L (8408)
1,4,7,10,13-Pentaoxacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal non-aq 25°C 0.05M U K1=2.79 1996RSc (86463) 600
Medium: 0.05 M Et4NI in MeOH; by K-selective electrode K1=2.64
DH(K1)=-25.3 kJ mol-1. In 0.05 M Et4NI in H2O K1=1.31

K+ cal non-aq 25°C 0.05M U K1=2.82 1996RSc (86464) 601
Medium: 0.05 M Et4NI in MeCN. DH(K1)=-9.0 kJ mol-1
****
C13H26O5 L (6410)
15,15-Dimethyl-1,4,7,10,13-pentaoxacyclohexadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con none 25°C 0.0 C K1=0.1 2001KMb (86473) 602

K+ con non-aq 25°C 100% C I K1=3.13 1992TFa (86474) 603
Medium: acetonitrile. In propylene carbonate, K1=2.89.

K+ con alc/w 25°C 100% U K1=2.54 1991IOa (86475) 604
Medium: MeOH
****
C13H26O6 L 19-Crown-6 CAS 55471-27-7 (8943)
1,4,7,10,13,16-Hexaoxacyclononadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% C I K1=4.62 2000TMb (86496) 605
Medium: CH3CN. In other media, K1=4.49 (propylene carbonate), 4.21 (MeOH),
2.60 (DMF), 2.01 (DMSO).

K+ con oth/un 25°C dil C K1=1.27 1999TMa (86497) 606
Self medium (KCl).
****
C13H26O7 L CAS 77887-91-3 (1662)
1,4,7,10,13,16-Hexaoxacyclononadecan-12-ol, Hydroxy-19-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=4.03 1983IKa (86507) 607
****
C13H27NO5 L (8611)
16-Methyl-1,4,7,10,13-Pentaoxa-16-azacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U H K1=5.46 1998SSf (86509) 608
Medium: 100% MeOH, 0,05 M Et4NI
****
C14H8O3 L CAS 6050-13-1 (5026)
2,2'-Biphenyldicarboxylic anhydride; (diphenic anhydride)

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq ? 100% U 1971TGa (86631) 609
K(KSCN+L)=-0.19
K(2KSCN+L)=0.91
Medium: CH3CN
****
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
---
K+ dis non-aq 24°C 100% C 2002MRd (88271) 610
K(K+A+L)=5.90
Medium: CDCl3. HA is picric acid.

K+ dis none 25°C dil C I M 2002THb (88272) 611
K(KL+A)=0.71
K(K+A+L(org)=KAL(org))=3.73
HA is picric acid. Data for several aryl and alkyl solvents.
Method: extraction of metal picrate into dichloromethane/L.

K+ con non-aq 25°C 100% C K1=4.46 B2= 8.66 2000ICa (88273) 612
Medium: nitromethane.

K+ con non-aq 25°C 100% C H K1=2.87 B2= 4.11 1999WBa (88274) 613
Medium: N,N-dimethylformamide. By calorimetry: DH(K1)=-19.8 kJ mol-1,
DH(K2)=-27.3 kJ mol-1.

K+ vlt non-aq 25°C 100% C I K1=4.2 1999WKb (88275) 614
Medium: acetonitrile, 0.10 M Et4NClO4. Also data for TMS, propylene carbonate, acetone, formamide, DMF, DMA, DMSO, MeOH, EtOH.

K+ dis oth/un 25°C 0 U K1=2.87 1994OUa (88276) 615

K+ ISE alc/w ? 100% U K1=2.73 B2=6.13 1992CLb (88277) 616
Medium: MeOH

K+ ISE alc/w 25°C 100% C K1=2.88 B2= 6.03 1992PTa (88278) 617
Method: Na ion selective electrode. Medium: methanol, 1-5 mM KBr.
Data for 4,5-dibromo-, 4,5-dimethoxy- and 4,5-dibutoxybenzo-15-crown-5.

K+ ISE mixed 25°C 50% C K1=2.0 B2= 4.60 1991LMc (88279) 618
Method: K ion selective glass electrode. Medium: 50% w/w MeOH/DMF.

K+ cal non-aq 25°C 100% U H K1=3.58 1989SSd (88280) 619
Medium: CH3CN

K+ cal non-aq 25°C 100% C H K1=4.17 1988BUb (88281) 620
Medium: acetonitrile. DH(K1)=-23.4 kJ mol-1, DS(K1)=1.0 J K-1 mol-1.

K+ con non-aq 25°C 100% C I K1=2.49 1988TKb (88282) 621
Medium: MeCN. In propylene carbonate K1=2.78; in MeOH 2.71

K+ con non-aq 25°C 100% C T H K1=3.24 1988TMb (88283) 622
Medium: acetonitrile. Data for 15-35 C. Anion: tetraphenylborate.
DH(K1)=-24.5 kJ mol-1, DS(K1)=-20.0 J K-1 mol-1.

K+ sp non-aq 22°C 100% U K1=5.90 1987CCc (88284) 623
In deuterochloroform

K+ ISE alc/w 25°C 90% U K1=2.63 1987KHa (88285) 624
Medium: 90% w/w MeOH/H2O

K+ con non-aq 25°C 100% C I K1=2.96 B2= 6.16 1987ZBb (88286) 625
Medium: MeOH. In 70% w/w MeOH/H2O, K1=1.97, K2=2.40.

K+ sp mixed 25°C 20% U I K1=0.81 1986GSa (88287) 626
In 0.015 M Et4N.Cl, 20% CH3CN/H2O. In 40%, K1=1.34; 60%, K1=2.00;
80%, K1=2.88; 100% CH3CN, K1=4.27.

K+ cal alc/w 25°C ? C K1=1.50 B2=6.24 1986LWa (88288) 627

K+ ISE alc/w 25°C 100% C K1=3.05 B2=6.43 1985ZFa (88289) 628

K+ con non-aq 25°C 100% U H K1=2.78 1982TAa (88290) 629
Medium: propylene carbonate

K+ ISE alc/w 25°C 100% C K1=2.8 B2=5.95 1981PTa (88291) 630

Medium: MeOH
****
C14H20O5 HL CAS 65112-35-8 (6061)
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
---
K+ cal alc/w 25°C 100% U H K1=1.26 1987ZBa (88388) 631
Medium: MeOH. DH=-12.5 kJ mol-1; DS=-17.8.
****
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
---
K+ gl KCl 25°C 1.00M U K1=0.18 1984MFa (88695) 632

K+ oth R4N.X 25°C 0.50M U K1=1.83 1971CSa (88696) 633
K(K+HL)=0.78
Method: polarimetry. Medium: Me4NOH

K+ gl oth/un 25°C 0.10M U K1=1.52 1970CSa (88697) 634
Medium: CsNO3
****
C14H24O8 L CAS 96813-83-1 (2271)
1,4,7,10,13,16-Hexaoxacycloeicos-17,20-dione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% U H K1=1.94 1980LIb (90043) 635
Medium: MeOH. DH=-23.0 kJ mol-1.
****
C14H24O8S L CAS 63689-67-8 (2274)
1,4,7,10,13,16-Hexaoxa-19-thia-cycloheneicos-17,21-dione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% U H K1=2.09 1980LIb (90047) 636
Medium: MeOH. DH=-16.1 kJ mol-1.
****
C14H24O9 L CAS 63689-61-2 (2273)
1,4,7,10,13,16,19-Heptaoxacycloheneicosa-17,21-dione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% U H K1=2.32 1980LIb (90057) 637
Medium: MeOH. DH=-27.0 kJ mol-1.
****
C14H24O10 HL 18-6A2 CAS 76871-57-3 (5407)
1,2-Bis-carboxy-18-crown-6;

```
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         gl  alc/w  25°C  90%  U        K1=6.17        1984FWa (90061) 638
                                         B(KHL)=12.0
Medium: 90% v/v MeOH/H2O, 0.05 M R4NX
********************************************************************************
C14H25N3O7            H3L                          (5397)
1-Oxa-4,7,10-triazacyclododecane-4,7,10-triethanoic acid;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         gl  R4N.X  25°C 0.10M U        K1=2.78        1988ADa (90087) 639
********************************************************************************
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
--------------------------------------------------------------------------------
K+         gl  R4N.X  25°C 0.10M C        K1=1.69        1987DDb (90193) 640
********************************************************************************
C14H26N2O8            H2L                          (6658)
1,4,10,13-Tetraoxa-7,16-diaza-2,3-dicarboxycyclooctadecane;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         gl  R4N.X  25°C 0.10M U        K1=2.00        1990AFa (90222) 641
********************************************************************************
C14H26O5               L                      CAS 17454-48-7  (5039)
Cyclohexyl-15-crown-5, 2,3-Cyclohexyl-1,4,7,10,13-pentaoxacyclopentadecane;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         ISE non-aq 25°C 100%  M  IH    K1=3.70   B2=6.90   1988BUa (90270) 642
Medium: propylene carbonate (also CH3CN), 0.05 M (CH3CH2)4NClO4.
DH(K1)=-26.2, DH(K2)=-20.1 kJ mol-1; DS(K1)=-17.4, DS(K2)=-6.37 J K-1 mol-1
--------------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  A        K1=3.58   B2=5.46   1971FRa (90271) 643
Medium: MeOH. In H2O: K1=0.6
********************************************************************************
C14H26O7               L                      CAS 83410-59-7  (613)
3,3-Dimethyl-1,4,7,10,13,16-hexaoxacyclooctadecan-2-one,
3,3-Dimethyl-2-one-18-crown-6;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U        K1=3.99        1982MKa (90274) 644
Medium: MeOH
********************************************************************************
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
K+	cal	non-aq	25°C	100%	C	H		1999WBa (90373)	645

Medium: N,N-dimethylformamide. DH(K1)=-3.4 kJ mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.05M	C	H	K1=2.7	1996BCh (90374)	646

Medium: 0.05 M Et4NClO4. By calorimetry: K1=2.5, DH(K1)=-0.9 kJ mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	non-aq	25°C	100%	M	H	K1=2.47	1994BCd (90375)	647

Medium: acetone. DH(K1)=-15.8 kJ mol-1, TDS=-1.8

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	20°C	100%	U		K1=2.3	1992PSa (90376)	648

Medium: DMF, 0.01 M Me4NI

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	non-aq	25°C	100%	M	IH	K1=3.49 B2=5.92	1988BUa (90377)	649

Medium: propylene carbonate (also CH3CN), 0.05 M (CH3CH2)4NClO4.
DH(K1)=-30.0, DH(K2)=-5.0 kJ mol-1; DS(K1)=-33.9, DS(K2)=29.5 J K-1 mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	non-aq	25°C	100%	U	H	K1=3.50	1986BUb (90378)	650

In CH3CN. DH=-29.3 kJ mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	alc/w	25°C	100%	U	H	K1=2.36	1986BUd (90379)	651

In MeOH. DH=-23.2 kJ mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	non-aq	25°C	100%	C	I	K1=3.22	1985CKa (90380)	652

Medium: propylenecarbonate. In DMF K1=1.51

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	non-aq	25°C	100%	U		K1=2.84	1981CRa (90381)	653

Medium: MeCN. In DMF: K1<2.5; in DMSO: <2.0; in EtOH: <2.6; in NMP: 2.44

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	non-aq	25°C	100%	U		K1=3.3	1980CRa (90382)	654

Medium: Propylene carbonate

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	EMF	non-aq	25°C	100%	C		K1=<2.0	1979BLb (90383)	655

Method: Ag electrode; competition with Ag+. Medium: MeOH, 0.05 M Me4NClO4.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.05M	C	I	K1=<2.0	1975LSc (90384)	656

In 95% MeOH: K1=2.26; 100%: 2.3

****

C14H28N2O4 L Cryptand 2,2,0 CAS 95334-31-9 (6544)
4,7,13,16-Tetraoxa-1,10-diazabicyclo[8.8.2]eicosane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	R4N.X	25°C	0.05M	U	I	K1=<2	1991LSb (90461)	657

Medium: 0.05 M Et4NClO4. In MeCN: K1=7.2; DMF: K1=3.2

****

C14H28N2O7 L (2509)
1,17-Diacetamido-3,6,9,12,15-pentaoxaheptadecane; O((CH2.CH2.O)2.CH2.CH2.CO.NH2)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=1.89	1975CJa (90492)	658

Medium: MeOH

****

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
K+	sol	non-aq	25°C	100%	C		K1=4.60	1999KCa (90523)	659

Medium: acetonitrile.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=4.35	1983GGa (90524)	660

Medium: MeOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	alc/w	25°C	100%	U	H	K1=4.22	1980LIa (90525)	661

Medium: MeOH. DH=-35.9 kJ mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	A		K1=4.41	1971FRa (90526)	662

Medium: MeOH

****

C14H30NO2P L (2094)
P-(N,N-Diethylamidocarbonyl)methyl-P,P-dibutylphosphine oxide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C		C		K1=2.6	1999ESa (90552)	663

In tetrahydrofuran; alkali metal is used as 2,4-dinitrophenolate

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=2.35	1988YKa (90553)	664

Medium: tetrahydrofuran

****

C14H30N2O4 L CAS 85726-93-8 (644)
4,10-Dimethyloxyethylidene-1,7-dioxy-4,10-diazacyclododecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sol	non-aq	20°C	100%	C		K1=3.97	1983SLa (90561)	665

Medium: CHCl3

****

C14H30N2O4 L CAS 31255-13-7 (2448)
N,N'-Dimethyl-cyclo-1,10-diaza-4,7,13,16-tetraoxaoctadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	alc/w	25°C	95%	C		K1=4.55	2004KVa (90577)	666

Medium: 95% MeOH/H2O, 0.01 M Et4NClO4.

K+ ISE alc/w 25°C 100% U I K1=5.18 1998SSf (90578) 667
Medium: 100% MeOH, 0,05 M Et4NI. Many other crown ethers studied

---

K+ ISE alc/w 25°C 90% C K1=4.10 1980LVb (90579) 668
Method: K ion selective glass electrode. Medium: 90% v/v MeOH/H2O, 0.10 M Me4NBr. Also data for MeNH3+, EtNH3+ and C6H5.(CH2)2NH3+ cations.

K+ gl alc/w 25°C 93% U K1=3.30 1978WVa (90580) 669
Medium: 93% MeOH/H2O

****

C14H30N2O5 L (6722)
7,13-Bis(2-hydroxyethyl)-1,4,10-trioxa-7,13-diazacyclopentadecane

---

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

---

K+ ISE non-aq 25°C 100% U K1=3.08 1993RPa (90629) 670
Medium: dimethylformamide, 0.05 M Et4NClO4. By competition with Ag+.

****

C14H30N2O5 L (6929)
N,N'-Bis(hydroxyethyl)-1,4-diaza-7,10,13-trioxacyclopentadecane;

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

---

K+ cal alc/w 25°C 90% U H K1=2.43 1994IZa (90638) 671
Medium: 90% v/v MeOH/H2O. DH(K1)=-33.0 kJ mol-1,
DS(K1)=-64.1 J K-1 mol-1

****

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

---

K+ dis non-aq 25°C 100% C K1=8.32 1998KSc (90694) 672
Medium: 1,2-dichloroethane.

K+ con non-aq 25°C 100% U K1=4.7 1993EVa (90695) 673
Medium: THF+CHCl3 (4:1 vol). Also data for other solvents

K+ ISE alc/w 25°C 100% U K1=2.55 1975CJa (90696) 674
Medium: MeOH

****

C15H12O2 HL Diphenylacac CAS 120-46-7 (362)
1,3-Diphenylpropane-1,3-dione, Dibenzoylmethane; C6H5.CO.CH2.CO.C6H5

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

---

K+ gl alc/w 25°C 100% U K1=1.6 1965LIa (91550) 675
Medium: MeOH, 0.1 M KI

K+ gl diox/w 30°C 75% U K1=3.67 1954FUa (91551) 676
****
C15H18NO7Cl L CAS 71022-76-9 (2322)
19-Chloro-3,6,9,12,15-pentaoxa-21-azabicyclo[15.3.1]heneicosa-1(21),17,19-teiene-2,16-dione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% U H K1=4.73 1980BMa (91993) 677
Medium: MeOH. DH=-33.3 kJ mol-1.
****
C15H19NO7 L CAS 64397-58-4 (2170)
3,6,9,12,15-Pentaoxa-21-azabicyclo[15.3.1]heneicosa-1(21),17,19-triene-2,16-dione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% U H K1=4.66 1981BBb (92117) 678
Medium: MeOH. DH(K1)=-39.0 kJ mol-1

K+ cal alc/w 25°C 100% U H K1=4.66 1980BMa (92118) 679
Medium: MeOH. DH=-38.9 kJ mol-1.

K+ cal alc/w 25°C 100% U H K1=4.66 1980LIb (92119) 680
Medium: MeOH. DH=-38.9 kJ mol-1

K+ sp alc/w 25°C 100% U H K1=4.66 1977ILc (92120) 681
Medium: Methanol. DH(K1)= -38.9 kJ mol-1
****
C15H22O5 L CAS 65112-33-6 (6058)
18-Methoxy-3,6,9,12-tetraoxabicyclo[12.3.1]octadeca-1(18),14,16-triene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% U H K1=1.97 1987ZBa (92249) 682
Medium: MeOH. DH=-19.9 kJ mol-1; DS=-29.2. By potentiometry: K1=2.00.
****
C15H23NO5 L CAS 53914-89-9 (2262)
3,6,9,12,15-Pentaoxa-21-azabicyclo[15.3.1]heneicosa-1(21),17,19-triene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% U H K1=5.35 1980BMa (92268) 683
Medium: MeOH. DH=-38.1 kJ mol-1.

K+ cal alc/w 25°C 100% U H K1=5.35 1980LIa (92269) 684
Medium: MeOH. DH=-38.1 kJ mol-1.

K+ sp alc/w 25°C 100% U H K1=5.35 1977ILc (92270) 685
Medium: Methanol. DH= -38.1 kJ mol-1

****
C15H24NO2P L (7846)
N,N-Diethylcarbamoylmethyl-(P-phenyl-P-propylphosphineoxide);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C C K1=2.4 1999ESa (92328) 686
In tetrahydrofuran; alkali metal is used as 2,4-dinitrophenolate
****
C15H24O6 HL CAS 57722-03-9 (2353)
1-Hydroxy-2-(1,4,7,10,13-pentaoxatridecyl)benzene; HO.C6H4.O(CH2CH2O)4CH3

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp alc/w 25°C 100% U K1=3.40 1981EMb (92343) 687
Medium: MeOH

K+ ISE alc/w 25°C 100% U K1=2.08 1975CJa (92344) 688
Medium: MeOH
****
C15H26O8 L CAS 96517-83-8 (2272)
1,4,7,10,13,16-Hexaoxacycloheneicos-17,21-dione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% U H K1=1.71 1980LIb (92457) 689
Medium: MeOH. DH=-20.5 kJ mol-1.
****
C15H33N3O3 L CAS 220811-82-5 (7916)
1,4,7-Tris((S)-2-hydroxypropyl)-1,4,7-triazacyclononane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ EMF non-aq 25°C 100% U K1=2.28 2001WBa (92574) 690
Medium: DMF, 0.05 M Et4NClO4. Also data for the 1,4,7-tris((S)-2-hydroxy-
2-phenyethyl- derivative (K1=1.91). Competition with Ag+.
****
C15H33N3O3 L CAS 75403-76-8 (8202)
4,6,10-Trimethyl-1,7,13-trioxa-4,10,16-triazacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 90% C K1=3.78 1980LVb (92578) 691
Method: K ion selective glass electrode. Medium: 90% v/v MeOH/H2O, 0.10 M
Me4NBr. Also data for MeNH3+, EtNH3+ and C6H5.(CH2)2NH3+ cations.
****
C15H36NO9P3 L CAS 37909-50-5 (2634)
(N,N-Dimethylamine)methylenetris(phosphonic acid diethyl ester);
(CH3)2N.C(CH2.PO(OC2H5)2)2

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         con non-aq 22°C 100%  U        K1=1.66        1981SKd (92603) 692
Medium: CH3CN
*************************************************************************
C16H8N6O10             HL                    CAS 2698-85-9  (5150)
N-(2,4,6-Trinitrobenzo)-2,4-dinitro-1-naphthylamine;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         dis oth/un 25°C  var  U        K1=2.62        1972IWb (92633) 693
-------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U                       1972IWb (92634) 694
                                       K1=1.50 (dry nitrobenzene)
                                       K1=1.10 (wet nitrobenzene)
Medium: nitrobenzene.
*************************************************************************
C16H16O6              H2L                      (5634)
1-(2-Hydroxyphenyl)-4-(2-carboxymethoxyphenyl)-1,4-dioxabutane;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U        K1=1.55        1981PTb (93715) 695
Medium: MeOH
*************************************************************************
C16H18O5              H2L                      (5623)
1,7-bis(2-Hydroxy-phenyl)-1,4,7-trioxaheptane; O(CH2.CH2.O.C6H4.OH)2
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U        K1=1.09        1981PTb (93875) 696
Medium: MeOH
*************************************************************************
C16H20N3O8F3           L                        (1041)
2,4-Dinitro-6-trifluoromethylphenyl-aminomethyl-12-crown-4
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  mixed  25°C  16%  U        K1=2.93        1984BPa (94083) 697
                                       K(K+HL)=1.33
*************************************************************************
C16H20O3P2             L                     CAS 82154-46-9  (2914)
Dimethylphosphinomethyl-diphenylphosphinomethyl-ether;Me2PO.CH2.O.CH2.PO(C6H5)2
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=2.22        1982YSa (94098) 698
Medium: tetrahydrofuran+CHCl3 4:1(vol); M is 2,4-dinitrophenolate
*************************************************************************
C16H22O6               L                        (6667)
```

2'-Acetyl-2,3-benzo-1,4,7,10,13-pentaoxacyclopentadeca-2-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w ? 100% U K1=2.83 B2=5.85 1992CLb (94240) 699
Medium: MeOH. Data also for 2'-t-butyl, 2'-(1,1-dibutylethyl), 2'-(1-methyl-1-dodecylethyl) analogues and others
****
C16H22O6 HL (6823)
3,6,9,12-Tetraoxabicyclo[12.3.1]octadeca-1(18),14,16-triene-18-ethanoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ kin alc/w 25°C 100% U K1=1.04 1992CDc (94243) 700
Medium:MeOH. Data also for other related ligands
****
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
---
K+ con non-aq 25°C 100% U K1=4.80 1976UHa (94267) 701
Medium: acetone
****
C16H24O5 L (2245)
1,3-Benzo-18-crown-5, 1,3-Benzo-5,8,11,14,17-pentaoxacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% U H 1979KLa (94342) 702
K(K(picrate)+L)=5.03
Medium: CHCl3

K+ dis non-aq 24°C 100% C 1977MTc (94343) 703
K(KA+L)=5.04
Method: extraction of metal picrate (A) from H2O into CDCl3 containing L.
Data for the 5'-bromo, 5'-t-butyl, 5'-methoxy and 5'-cyanobenzo-derivs
****
C16H24O5 L AN(MOEO)2E CAS 60232-72-6 (2246)
18-Methoxy-16-methyl-3,6,9,12-tetraoxabicyclo[12.3.1]octadeca-1(18),14,16-triene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% U H 1979KLa (94353) 704
K(K(picrate)+L)=4.32
Medium: CHCl3
****
C16H24O5 L CAS 75507-20-9 (605)
Benzyloxymethyl-1,4,7,10-tetraoxacyclododecane, Benzyloxymethyl-12-crown-4;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=1.42 B2=2.71	1982MYc (94359)	705

Medium: MeOH

****

C16H24O6 L Benzo18-crown-6 CAS 14098-24-9 (513)
2,3-Benzo-1,4,7,10,13,16-hexaoxacyclooctadeca-2-ene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	oth	KCl	25°C	0.05M	C		K1=1.68	2002KTa (94400)	706

Method: capillary electrophoresis. Medium: 0.03-0.06 M KCl.
By conductivity in 0.001-0.004 M KCl, K1=1.664.

K+	dis	NaClO4	25°C	0.1M	C	I		2002TYa (94401)	707
							K(KL+ClO4)=-0.49		

Extraction of NaClO4 with L into dichloromethane.
K(K+L(org)+ClO4=KLClO4(org))=2.95. K(KL+ClO4=KLClO4(org)=3.73.

K+	con	non-aq	25°C	100%	C		K1=>6	2000ICa (94402)	708

Medium: nitromethane.

K+	dis	non-aq	25°C	100%	U		K1=10.16	2000KSa (94403)	709

Medium: 1,2-dichloroethane

K+	oth	alc/w	25°C	3%	U	M		2000MTa (94404)	710
							K(KL+phenolate)=0.33		
							K(KL+o-nitrophenolate)=0.54		
							K(KL+m-nitrophenolate)=0.68		
							K(KL+p-nitrophenolate)=0.89		

Method: CZE. Medium: 3% v/v EtOH/H2O. K(KL+2,4-dinitrophenolate)=1.39,
K(KL+picrate)=1.49, K(KL+SCN)=0.82, K(KL+ClO4)=0.68

K+	oth	alc/w	35°C	3.0%	C		K1=1.73	1999MTd (94405)	711

Method: capillary zone electrophoresis. Medium: 3% v/v EtOH/H20, 0.005 M
phosphate buffer, pH 7.0

K+	cal	non-aq	25°C	100%	C	H	K1=3.63	1999WBa (94406)	712

Medium: N,N-dimethylformamide. DH(K1)=-32.6 kJ mol-1.

K+	dis	oth/un	25°C	0	U		K1=4.76	1994OUa (94407)	713

K+	dis	oth/un	25°C	0.01M	U	M		1992TSb (94408)	714
							K(K(picrate)+L)=3.12		

K+	con	none	20°C	0.0	C T H		K1=1.80	1990TAa (94409)	715

Data for 15-32 C. At 15 C, K1=1.84; at 30 C, K1=1.685
At 25 C, DH(K1)=-18.1 kJ mol-1, DS(K1)=-27.5 J K-1 mol-1.

K+ con none 25°C 0.0 U K1=1.744 1989TKa (94410) 716
K1=1.79 by potentimetry using an ion selective electrode

K+ sp non-aq 22°C 100% U K1=7.20 1987CCc (94411) 717
In deuterochloroform

K+ ISE alc/w 25°C 90% U K1=4.75 1987KHa (94412) 718
Medium: 90% w/w MeOH/H2O

K+ cal non-aq 25°C 100% C H K1=5.29 1986ICa (94413) 719
Medium: MeOH. DH(K1)=-44.85 kJ mol-1, DS(K1)=-49.0 J K-1 mol-1.

K+ cal alc/w 25°C 80% U H K1=3.82 1985LWa (94414) 720

K+ sp diox/w 25°C 0.0 U I K1=3.11 1983KOa (94415) 721
On PVA. In 24.4% w/w dioxan/H2O. Data given for 9.7-84.6 w/w mixtures.

K+ sp mixed 25°C 0.0 U I K1=2.88 1983KOa (94416) 722
On PVA. In 21.9% w/w tetrahydrofuran/H2O. Data given for 11.1-86.4 w/w mix
---
K+ ISE alc/w 25°C 100% U K1=4.9 1982GRc (94417) 723
Medium: MeOH

K+ sp alc/w 25°C 100% U K1=5.27 1981EMb (94418) 724
Medium: MeOH. By polarography at 22 C: K1=5.22

K+ ISE alc/w 25°C 100% C K1=5.2 1981PTa (94419) 725
Medium: MeOH

K+ sp diox/w 25°C 100% U M 1981SSd (94420) 726
K(K(Picrate)+L)=5.24

K+ con non-aq 25°C 100% U K1=5.10 1976UHa (94421) 727
Medium: acetone
****
C16H24O6 HL CAS 65112-36-9 (6060)
3,6,9,12,15-Pentaoxabicyclo[15.3.1]heneicosa-1(21),17,19-trien-21-ol;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% U H K1=3.18 1987ZBa (94472) 728
Medium: MeOH. DH=-33.5 kJ mol-1; DS=-51.3. By ISE potentiometry: K1=3.15
****
C16H24O14 H4L CAS 61696-54-6 (6104)
1,4,7,10,13,16-Hexaoxacyclooctadeca-2,3,11,12-tetracarboxylic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl R4N.X 25°C 0.10M M K1=2.9 1991FGb (94493) 729
B(KHL)=7.4

Medium: 0.10 M Et4NNO3.

K+ ISE oth/un 25°C 0.10M C K1=5.48 1982BLc (94494) 730

Method: K ion selective electrode. Medium: 0.10 M Tris buffer, pH 7.0

K+ ISE R4N.X 25°C 0.10M U K1=5.48 1976BLb (94495) 731

Method: K ion selective electrode. Medium: 0.10 M (Me4N)H2PO4, pH 7.0

****

C16H25NO4 L (7444)

1-Aza-4,7,10,13-tetraoxa-1-phenyl-cyclopentadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	nmr	alc/w	20°C	100%	C		K1=9.26	1989GSc (94518)	732

Medium: 100% MeOH. Method: 1H pulsed gradient spin-echo nmr

****

C16H26NO2P L (2093)

P-(N,N-Diethylamidocarbonyl)methyl(P-phenyl)(P-butyl)phosphine oxide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C		C		K1=2.5	1999ESa (94541)	733

In tetrahydrofuran; alkali metal is used as 2,4-dinitrophenolate

---

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=2.48	1988YKa (94542)	734

Medium: tetrahydrofuran

****

C16H26N2O12 H4L (6659)

1,4,10,13-Tetraoxa-7,16-diaza-2,3,11,12-tetracarboxycyclooctadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	U		K1=3.1	1990AFa (94588)	735

****

C16H26N2O12 H4L CAS 130190-52-2 (6660)

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

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	U		K1=3.3 B(KHL)=12.7	1990AFa (94602)	736

****

C16H26O6 L CAS 57721-93-4 (2502)

2,5,8,11,14,17-Hexaoxa-9,10-benzo-octadeca-9-ene; C6H4(O.(CH2.CH2.O)2.CH3)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	none	25°C	0.0	C		K1=0.38	1998KTb (94630)	737

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=2.15	1975CJa (94631)	738

Medium: MeOH
****
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
K+	gl	KCl	25°C	0.10M	C		K1=1.5	1991CMb (94907)	739
K+	gl	R4N.X	25°C	0.10M	C		K1=1.64	1982DSa (94908)	740

****
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
K+	gl	R4N.X	25°C	0.10M	U		K1=3.91	1983CRb (95043)	741

****
C16H30O6 L CAS 83410-56-4 (614)
3-Hexyl-1,4,7,10,13-pentaoxacyclopentadecan-2-one, 3-Hexyl-2-one-15-crown-5;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=1.90	1982MKa (95096)	742

Medium: MeOH
****
C16H30O6 L CAS 17454-53-4 (5148)
Cyclohexyl-18-crown-6;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	oth/un	25°C	dil	A	I	K1=1.90	1971FRa (95100)	743

In MeOH: K1=5.89
****
C16H30O7 L CAS 94618-63-0 (8714)
1,9-Dimethyl-2,5,8,11,14,17,20-heptaoxabicyclo[7.6.6]heneicosane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	non-aq	25°C	100%	M		K1=2.66	1984NMb (95104)	744

Medium: MeOH.
****
C16H32N2O4 L Cryptand 1,2,1H CAS 119017-36-6 (6587)
4,7,14,20-Tetraoxa-1,10-diazabicyclo[8.7.5]docosane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	alc/w	25°C	95%	M		K1=2.60	1990LNa (95117)	745

Medium: 95% MeOH, 0.05 M Bu4NBr. For the 9,13-dihydroxy- analogue: K1 < 2
****

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
K+	con	non-aq	25°C	100%	M	M	K1=7.63 K(KL+ClO4)=0.96	1999DSd (95211)	746

Medium: acetonitrile.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	non-aq	25°C	100%	C	H	K1=6.71	1999WBa (95212)	747

Medium: N,N-dimethylformamide. Method: competitive titration against Ag+, using Ag+ ISE. By calorimetry: DH(K1)=-53.5 kJ mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.05M	C	H	K1=3.8	1996BCh (95213)	748

Medium: 0.05 M Et4NClO4. By calorimetry: K1=4.1, DH(K1)=-36.3 kJ mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	non-aq	25°C	100%	M	H	K1=8.45	1994BCd (95214)	749

Medium: acetone. DH(K1)=-60.7 kJ mol-1, TDS=-12.7

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	20°C	100%	U		K1=6.4	1992PSa (95215)	750

Medium: DMF, 0.01 M Me4NI

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	non-aq	25°C	100%	C		K1=6.1	1989MGa (95216)	751

Medium: DMF, 0.10 M Et4NClO4

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	non-aq	25°C	100%	M	H	K1=9.15	1988BUa (95217)	752

Medium: propylene carbonate, 0.05 M (CH3CH2)4NClO4. DH(K1)=-66.0 kJ mol-1; DS(K1)=-47 J K-1 mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	non-aq	25°C	100%	U	H	K1=9.10	1986BUb (95218)	753

In CH3CN. DH=-64.1 kJ mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	alc/w	25°C	100%	U	H	K1=8.40	1986BUd (95219)	754

In MeOH. DH=-61.1 kJ mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	nmr	non-aq	25°C	100%	U		K1=11.22	1986CHc (95220)	755

In CDCl3 saturated with D2O

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	non-aq	25°C	100%	C	I	K1=6.00	1985CKa (95221)	756

Medium: DMSO. In propylenecarbonate K1=8.69; in DMF K1=6.59

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	non-aq	25°C	100%	U		K1=9.8	1980CRa (95222)	757

Medium: Propylene carbonate

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	kin	R4N.X	25°C	0.10M	U		K1=4.2	1980GBa (95223)	758

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=8.54	1978CSb (95224)	759

Medium: MeOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	R4N.X	25°C	0.06M	C	H		1976KLc (95225)	760

Medium: 0.057 M Me4NBr. Method: flow microcalorimetry.
DH(K1)=-28.5 kJ mol-1, DS(K1)=-20 J K-1 mol-1.

K+ gl R4N.X 25°C 0.05M C I K1=3.95 1975LSc (95226) 761
In 95% MeOH: K1=7.45; 100%: > 8

****

C16H32N4O4 L (6794)
4,10-Bis(N,N-dimethylethanamido)-1,7-dioxa-4,10-diazacyclododecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	alc/w	25°C	100%	U	H	K1=3.85	1990KMb	(95319) 762

Medium: MeOH. DH=-25.7 kJ mol-1

****

C16H32N4O6 L CAS 98608-90-3 (1322)
N,N'-Bis(carbamoylmethyl)-1,7,10,16-tetraoxa-4,13-diazacyclooctadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	NaClO4	25°C	0.50M	U		K1=<2	1981KMb	(95334) 763

****

C16H32O7 L (6411)
15-(2,5-Dioxahexyl)-15-methyl-1,4,7,10,13-pentaoxacyclohexadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	C	I	K1=3.06	1992TFa	(95384) 764

Medium: acetonitrile. In propylene carbonate, K1=2.88.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	alc/w	25°C	100%	U		K1=2.43	1991IOa	(95385) 765

Medium: MeOH

****

C16H32O8 L 24-Crown-8 CAS 33089-37-1 (5149)
1,4,7,10.13,16,19,22-Octaoxacyclotetracosane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sol	non-aq	25°C	100%	C		K1=3.94	1999KCa	(95396) 766

Medium: acetonitrile.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	A		K1=3.48	1971FRa	(95397) 767

Medium: MeOH

****

C16H34N2O5 L (6953)
7,13-Bis(2-methoxyethyl)-1,4,10-trioxa-7,13-diazacyclopentadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	EMF	alc/w	25°C	100%	U	I	K1=4.69	1994LLa	(95415) 768

Medium: MeOH, 0.05M Et4NClO4. Also data for acetonitrile: K=5.24, PC: K=5.0

DMF: K=3.31 and H2O: K<2. Method: by competition with Ag+.

****

C16H34N2O6 L (6934)
N,N'-Bis(1-hydroxyethyl)-1,4-diaza-7,10,13,16-tetraoxacyclooctadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	alc/w	25°C	90%	U	H	K1=4.00	1994IZa (95431)	769

Medium: 90% v/v MeOH/H2O. DH(K1)=-23.9 kJ mol-1, DS(K1)=-3.7 J K-1 mol-1

****

C16H34N2O6 L CAS 69930-74-1 (1321)
N,N'-Bis(2-hydroxyethyl)-1,7,10,16-tetraoxa-4,13-diazacyclooctadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	non-aq	25°C	100%	U		K1=4.66	1993RPa (95449)	770

Medium: dimethylformamide, 0.05 M Et4NClO4. By competition with Ag+.

K+	gl	NaClO4	25°C	0.50M	U		K1=<2	1981KMb (95450)	771

****

C16H34O6 L CAS 57721-92-3 (2501)
2,5,8,15,18,21-Hexaoxadocosane; CH3.O.(CH2.CH2.O)2.(CH2)6.O.(CH2.CH2.O)2.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=<0.1	1975CJa (95485)	772

Medium: MeOH

****

C16H34O8 L CAS 1191-91-9 (2500)
2,5,8,11,14,17,20,23-Octaoxatetracosane; CH3.O.(CH2.CH2.O)7.CH3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=4.9	1993EVa (95490)	773

Medium: THF+CHCl3 (4:1 vol). Also data for other solvents

K+	ISE	alc/w	25°C	100%	U		K1=2.87	1975CJa (95491)	774

Medium: MeOH

****

C16H36N4 L CAS 54622-44-5 (147)
5,5,7,12,12,14-Hexamethyl-1,4,8,11-tetraazacyclotetradecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	non-aq	25°C	100%	U		K1=2.3	1986STb (95539)	775

Medium: THF:CHCl3 4:1 v/v. Metal ions as 2,4-dinitrophenolates

****

C16H36N4O4 L (6703)
1,4,7,10-Tetrakis(2-hydroxyethyl)-1,4,7,10-tetraazacyclododecane;

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         EMF non-aq 25°C 100%  U  I     K1=3.40        1996WPa (95572) 776
Medium: acetonitrile, 0.05 M NEt4ClO4.  In propylene carbonate K1=5.91
-------------------------------------------------------------------------
K+         gl  alc/w  25°C 100%  C  I     K1=2.43        1993TCa (95573) 777
Medium: MeOH, 0.05 M Et4NClO4. In DMF, K1=1.59
*************************************************************************
C17H20N4O6             HL    Riboflavin       CAS 83-88-5  (1438)
7,8-Dimethyl-10(D-1'-ribityl)isoalloxazine, Vitamin B2, Vitamin H
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sol oth/un 22°C       U        K1=-0.097      1980LDa (96338) 778
Medium: variable KNO3 content 0.1-2.5 M
*************************************************************************
C17H21O5P              L                        (5732)
Methyldi(2-methoxyphenoxymethyl)phosphine oxide; Me.PO(CH2.O.C6H4.OMe)2
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=1.88        1989TKb (96391) 779
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
*************************************************************************
C17H23NO6              L                        (7047)
5'-(N-Acrylamide)-benzo-15-crown-5; CH2:CH.CO.NH.C14H19O5
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  non-aq 25°C 100%  U        K1=9.67        1979KMb (96406) 780
Medium: CHCl3
*************************************************************************
C17H24N4O11            L                    CAS 94616-60-1  (1039)
2,4,6-Trinitrophenylaminomethyl-15-crown-5
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  mixed  25°C  16%  U        K1=2.28        1984BPa (96463) 781
                                        K(K+HL)=1.12
*************************************************************************
C17H24O7               L                    CAS 60835-74-7  (1767)
2,3-(4'-Formylbenzo)-1,4,7,10,13,16-hexaoxacyclooctadeca-2-ene;
4'-Formylbenzo-18-crown-6
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=4.89        1976UHa (96468) 782
Medium: acetone
*************************************************************************
C17H26O6               L                    CAS 32702-28-6  (1768)
```

2,3-(4'-Methylbenzo)-1,4,7,10,13,16-hexaoxacyclooctadeca-2-ene;
4'-Methylbenzo-18-crown-6

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	diox/w	25°C	100%	U	M	K(K(Picrate)+L)=5.73	1981SSd (96514)	783
K+	ISE	none	25°C	0.0	C		K1=2.04	1980WSb (96515)	784

Method: monovalent ion electrode. Also data for the4'-polyvinylbenzene-derivative: by spectrophotometry, K1=2.04

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=5.58	1976UHa (96516)	785

Medium: acetone

****

C17H26O6 L CAS 99159-90-7 (688)
2,3-Benzo-1,4,7,10,13,16-hexaoxacyclononadeca-2-ene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	22°C	100%	U		K1=6.35	1987CCc (96520)	786

In deuterochloroform

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	alc/w	25°C	80%	U	H	K1=3.33	1985LWa (96521)	787

****

C17H26O6 L CAS 65112-34-7 (6059)
21-Methoxy-3,6,9,12,15-pentaoxabicyclo[15.3.1]heneicosa-1(21),17,19-triene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	alc/w	25°C	100%	U	H	K1=3.52	1987ZBa (96527)	788

Medium: MeOH. DH=-24.7 kJ mol-1; DS=-15.4. By ISE potentiometry: K1=3.48

****

C17H30O6 H2L CAS 159029-04-6 (7605)
15-(Methoxymethoxy)-9,11-dioxo-pentadecanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	alc/w	RT	80%	C		K1=-0.09	1994HWc (96671)	789

Medium: 80%MeOH/H2O. Also data for many analogues.

****

C17H34N2O4 L CAS 142565-14-8 (6562)
4,7,13,16-Tetraoxa-1,10-diazabicyclo[8.8.5]tricosane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	EMF	non-aq	25°C	100%	C	I	K1=7.56	1993DLb (96743)	790

Medium: propylene carbonate, 0.05 M Et4NClO4. In acetonitrile, K1=6.26.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.05M	C	I	K1=3.41	1992CGb (96744)	791

Medium: Et4NClO4. In MeOH: K1=5.8; in DMF K1=3.85
****
C17H34N4O4S L CAS 503465-04-1 (9247)
4,7,13,16-Tetraoxa-1,10,21,23-tetraazabicyclo[8.8.7]pentacosane-22-thione;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	alc/w	25°C	95%	C		K1=3.51	2004KVa (96758)	792

Medium: 95% MeOH/H2O, 0.01 M Et4NClO4.
****
C17H34O5 L CAS 96047-83-5 (606)
Octyloxymethyl-1,4,7,10-Tetraoxacyclododecane, Octyloxymethyl-12-crown-4;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=1.36	1982MYc (96765)	793

Medium: MeOH
****
C17H35NO4 L (1694)
N-n-Heptanyl-1,4,7,10-tetraoxa-13-azacyclopentadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	10%	U		K1=2.29	1986HAa (96768)	794

Medium: 10% MeOH/H2O
****
C17H38O2P2 L CAS 21245-67-8 (2100)
Methylenebis(dibutylphosphine oxide); Bu2P(O)CH2P(O)Bu2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C		C		K1=3.0	1999ESa (96812)	795

In tetrahydrofuran; alkali metal is used as 2,4-dinitrophenolate
****
C18H18O8 H2L (5631)
1,4-bis(2-Carboxymethoxyphenyl)-1,4-dioxabutane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=2.23	1981PTb (97304)	796

Medium: MeOH
****
C18H20O5 L CAS 14262-60-3 (5616)
2,3:11,12-Dibenzo-1,4,7,10,13-pentaoxacyclopentadeca-2,11-diene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	C		K1=>1.74	2002YEa (97475)	797

Method: fluorescence spectroscopy. Medium: acetonitrile.

K+ ISE alc/w 25°C 100% U B2=5.7 1982GRc (97476) 798
Medium: MeOH

K+ ISE alc/w 25°C 100% C K1=2.0 B2=5.21 1981PTa (97477) 799
Medium: MeOH
****
C18H20O7 H2L (5627)
1-(2-Hydroxyphenyl)-7-(2-carboxymethoxyphenyl)-1,4,7-trioxaheptane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=2.24 1981PTb (97482) 800
Medium: MeOH
****
C18H22NO2P L (2092)
(N,N-Diethylamidocarbonyl)methyldiphenylphosphine oxide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C C K1=2.9 1999ESa (97505) 801
In tetrahydrofuran; alkali metal is used as 2,4-dinitrophenolate
---
K+ con non-aq 25°C 100% U K1=2.73 1988YKa (97506) 802
Medium: tetrahydrofuran
****
C18H22O5 L (5737)
1,7-Di(2-methoxyphenyl)-1,4,7-trioxaheptane; MeO.C6H4.O.C2H4.O.C2H4.O.C6H4.OMe
---
Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=2.19 1989TKb (97565) 803
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
****
C18H22O5 L (6668)
2,3-Naphtho-1,4,7,10,13-pentaoxacyclopentadeca-2-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w ? 100% U K1=2.71 B2=6.35 1992CLb (97568) 804
Medium: MeOH. Data also for 7'-t-butyl, 7'-(1,1-dibutylethyl) and
7'-(1-methyl-1-dodecylethyl) analogues

K+ dis non-aq 15°C 100% C 1985YIa (97569) 805
K(K+2L(org)+A=KL2A(org))=7.61
K(KL2(org)+A(org)=KL2A)=3.2
Media: H2O/dichloroethane. Analysis by spectrophotometry.
HA: picric acid.
****
C18H22O6 L (5633)
1,4-bis(2-Hydroxyethoxyphenyl)-1,4-dioxabutane;

```
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U        K1=1.74        1981PTb (97572) 806
Medium: MeOH
********************************************************************************
C18H23NO8               L                      CAS 332843-39-7  (8209)
2,3,5,6,8,9,11,12,14,15-Decahydro-1,4,7,10,13,16-hexaoxacyclooctadecino[2,3-]isoind
ole18,20dione;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         sp  non-aq 25°C 100%  C        K1=4.4         2001OYa (97575) 807
Medium: methanol. For the N-propyl derivative, K1=4.5.
********************************************************************************
C18H26O7                L                       (5656)
2,3-Acetylbenzo-1,4,7,10,13,16-hexaoxacyclooctadeca-2-ene;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U        K1=4.93        1982GRc (97730) 808
Medium: MeOH
********************************************************************************
C18H26O7                L                      CAS 83410-62-2  (615)
3-Phenyl-1,4,7,10,13,16-hexaoxacyclooctadecan-2-one, 3-Phenyl-2-one-18-crown-6;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U        K1=4.23        1982MKa (97732) 809
Medium: MeOH
********************************************************************************
C18H27N2O3F             L                      CAS 173417-90-8  (6571)
23-Fluoro-4,7,20-trioxa-1,10-diazatricyclo[8.7.5.1,12,16]tricosa-12,14,16(23)triene
;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         EMF non-aq 25°C 100%  C   H    K1=2.52        1999BHa (97747) 810
Medium: MeOH, 0.05 M Et4NClO4. By calorimetry DH(K1)=-3.3 kJ mol-1.
Method: by competition with Ag+, using Ag/Ag+ electrode.
********************************************************************************
C18H28N2O3              L                      CAS 154148-31-9  (6510)
4,7,20-Trioxa-1,10-diazatricyclo[8.7.5.1,12,16]tricosa-12,14,16(23)-triene;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         EMF non-aq 25°C 100%  C   H    K1=2.50        1999BHa (97770) 811
Medium: MeOH, 0.05 M Et4NClO4. By calorimetry DH(K1)=-24.5 kJ mol-1
Method: by competition with Ag+, using Ag/Ag+ electrode
********************************************************************************
```

C18H28O6 L Benzo20-crown-6 (6354)
2,3-Benzo-1,5,8,11,14,18-Hexaoxacosa-2-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 22°C 100% U K1=5.28 1987CCc (97835) 812
In deuterochloroform
****
C18H28O6 L CAS 85556-93-0 (642)
2,3-Benzo-8,15-dimethyl-1,4,7,10,13,16-hexaoxacycloocotadeca-2-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con alc/w 25°C 100% U K1=4.39 1983LSa (97841) 813
Medium: MeOH
****
C18H28O6 L AN(MOEOE)2O CAS 60232-73-7 (2247)
21-Methoxy-19-methyl-3,6,9,12,15-pentaoxabicyclo[15.3.1]heneicos-1(21),17,19-triene
;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% U H 1979KLa (97846) 814
K(K(picrate)+L)=6.26
Medium: CHCl3
****
C18H28O6 L CAS 100433-53-6 (607)
Benzyloxymethyl-1,4,7,10,13-pentaoxacyclopentadecane, Benzyloxymethyl-15-crown-5;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=5.2 1982GRc (97850) 815
Medium: MeOH

K+ ISE alc/w 25°C 100% U K1=3.16 B2=4.43 1982MYc (97851) 816
Medium: MeOH
****
C18H28O7 L Benzo21-crown-7 (6355)
2,3-Benzo-1,4,7,10,13,16,19-Heptaoxaheneicosa-2-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 22°C 100% U K1=6.81 1987CCc (97856) 817
In deuterochloroform
****
C18H30O6 L (2503)
3,6,9,12,15,18-Hexaoxa-10,11-benzo-eicosa-10-ene; C6H4(O.(CH2.CH2.O)2.C2H5)2

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

K+ ISE alc/w 25°C 100% U K1=1.78 1975CJa (98115) 818
Medium: MeOH
****
C18H32O4 L (5234)
2,3:9,10-Dicyclohexyl-1,4,8,11-tetraoxacyclotetradecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% A K1=1.30 1971FRa (98270) 819
Medium: MeOH
****
C18H33NO9 HL 4NH18-C6A CAS 83572-66-1 (5404)
2-Carboxy-3-N-butylformamide-1,4,7,10,13,16-hexaoxacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 90% U K1=5.8 1984FWa (98287) 820
B(KHL)=10.7
Medium: 90% v/v MeOH/H2O, 0.05 M R4NX
****
C18H34O7 L (616)
3-Hexyl-1,4,7,10,13,16-hexaoxacyclooctadecan-2-one, 3-Hexyl-2-one-18-crown-6;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=3.84 1982MKa (98392) 821
Medium: MeOH
****
C18H34O8 L CAS 94618-62-9 (8713)
1,11-Dimethyl-3,6,9,12,15,18,20,23-octaoxabicyclo[9.7.6]tetracosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE non-aq 25°C 100% M K1=5.94 1984NMb (98394) 822
Medium: MeOH.
****
C18H34O9 L CAS 57721-61-7 (2510)
3,6,9,12,15-Pentaoxaheptadecane-1,17-dioic acid diethyl ester
---
Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=1.78 1975CJa (98397) 823
Medium: MeOH
****
C18H36N2O5 L Cryptand 1,2,2H (6605)
1,10-Diaza-4,7,14,20,23-Pentaoxabicyclo[8.8.7]pentacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 95% M K1=5.11 1990LNa (98406) 824

Medium: 95% MeOH, 0.05 M Bu4NBr. For the 12,16-dihydroxy- analogue: K1=3.40
****
C18H36N2O5 L Cryptand 2,2,1H CAS 119017-37-7 (6588)
5,8,15,18,23-Pentaoxa-1,12-diazabicyclo[10.8.5]pentacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 95% M K1=4.14 1990LNa (98414) 825
Medium: 95% MeOH, 0.05 M Bu4NBr. For the 9,16-dihydroxy- analogue: K1=2.44
****
C18H36N2O6 L Cryptand 3,2,1 (7303)
1,10-Diaza-4,7,13,16,19,24-hexaoxabicyclo[8,11,5]hexacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal none 25°C 0 U IH K1=4.00 1997ZIa (98420) 826
DH(K1)=-32.9 kJ mol-1, DS=-33.9. In 95% v/v MeOH/H2O: K1=8.61, DH(K1)=55.7, DS=-22.1
****
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
---
K+ con non-aq 25°C 100% M M K1=>12 1999DSd (98589) 827
K(KL+ClO4)=0.84
Medium: acetonitrile.

K+ vlt non-aq 25°C 100% C I K1=11.3 1999FKb (98590) 828
Medium: acetonitrile, 0.10 M Et4NClO4. Method: cyclic voltammetry.
Also in: DMF (K1=8.0), DMSO (7.0), MeOH (10.4), acetone (10.4) etc.

K+ ISE non-aq 25°C 100% C H K1=7.82 1999WBa (98591) 829
Medium: N,N-dimethylformamide. Method: competitive titration against
Ag+, using Ag+ ISE. By calorimetry: DH(K1)=-60.2 kJ mol-1.

K+ gl R4N.X 25°C 0.05M C H K1=6.0 1996BCh (98592) 830
Medium: 0.05 M Et4NClO4. By calorimetry: DH(K1)=-52.3 kJ mol-1.

K+ cal alc/w 25°C 80% C H K1=8.52 1995KZa (98593) 831
Medium: 80% v/v CH3OH/H2O. DH(K1)=-65.8 kJ mol-1, DS(K1)=-57.7 J K-1 mol-1

K+ cal non-aq 25°C 100% M H K1=10.04 1994BCd (98594) 832
Medium: acetone. DH(K1)=-69.0 kJ mol-1, TDS=-12.0

K+ ISE oth/un 25°C 0.05M M K1=10.49 1992BUb (98595) 833
K1=9.82 (by potentiometry)

K+ ISE non-aq 25°C 100% U K1=10.50 1992CSc (98596) 834
Ag/Ag+ electrode. Medium: MeCN, 0.05 M Bu4NClO4

K+ ISE non-aq 25°C 100% M H K1=11.00 1988BUa (98597) 835
Medium: propylene carbonate, 0.05 M (CH3CH2)4NClO4. DH(K1)=-72.8 kJ mol-1; DS(K1)=-34.5 J K-1 mol-1

K+ con none 25°C 0.0 U K1=5.4 1988DSb (98598) 836

K+ ISE non-aq 25°C 100% U H K1=9.56 1986BUb (98599) 837
In CH3CN. DH=-74.0 kJ mol-1

K+ cal alc/w 25°C 100% U H K1=9.82 1986BUd (98600) 838
In MeOH. DH=-75.0 kJ mol-1

K+ nmr non-aq 25°C 100% U K1=13.20 1986CHc (98601) 839
In CDCl3 saturated with D2O

K+ cal non-aq 25°C 100% U H 1986DGa (98602) 840
DH1 = -80.3 kJ mol-1. Medium: nitromethane

K+ ISE non-aq 25°C 100% C I K1=7.18 1985CKa (98603) 841
Medium: DMSO. In DMF K1=8.03

K+ cal non-aq 25°C 100% U H 1985DGa (98604) 842
Medium: propylene carbonate. DH1 = -71.9 kJ mol-1

K+ cal non-aq 25°C 100% U H 1985DGa (98605) 843
Medium: acetonitrile. DH1 = -71.3 kJ mol-1

K+ ISE non-aq 25°C 100% M K1=12.58 1985DGb (98606) 844
Medium: nitromethane

K+ cal non-aq 25°C 100% U H 1984DGa (98607) 845
Medium: N,N-dimethylformamide. DH1=-54.5 kJ mol-1; DS1=-31.0 J K-1 mol-1.

K+ cal non-aq 25°C 100% U H 1984DGa (98608) 846
Medium: DMSO. DH1=-61.2 kJ mol-1; DS1=-71.5 J K-1 mol-1

K+ gl oth/un 25°C 0.10M U I K1=5.6 1982CFb (98609) 847
In MeCN, mol fraction n: K1=6.5 (n=0.1); 7.1 (n=0.2); 8.1 (0.4); 8.9 (0.6); 9.7 (n=0.7); 10.3 (n=0.9)

K+ ISE non-aq 25°C 100% U I K1=11.31 1981CRa (98610) 848
Medium: MeCN. In DMSO: K1=7.11; in EtOH: 10.50; in DMF: 7.98;
in N-methylpropanoamide: 8.4

K+ sp diox/w 25°C 100% U M 1981SSd (98611) 849
K(K(Picrate)+L)=8.3

K+ ISE non-aq 25°C 100% U K1=11.1 1980CRa (98612) 850
Medium: Propylene carbonate

K+ kin R4N.X 25°C 0.10M U K1=5.4 1980GBa (98613) 851

K+ con non-aq 25°C 100% U K1=>7 1980KMb (98614) 852
Medium: MeCN

K+ ISE alc/w 25°C 100% U K1=10.4 1978CSb (98615) 853
Medium: MeOH

K+ EMF oth/un 25°C 0.05M C I K1=5.4 1978YTa (98616) 854
Method: competition with Tl+, using Tl amalgam electrode.
Electrolyte not stated. In MeOH, 0.05 M: K1=10.8. In DMSO, 0.10 M: K1=6.0

K+ cal alc/w 25°C 100% C 1977ADa (98617) 855
Medium: methanol. DH(K1)=-69.9 kJ mol-1. In H2O, DH(K1)=-48.5 kJ mol-1.

K+ cal R4N.X 25°C 0.06M C IH 1976KLc (98618) 856
Medium: 0.057 M Me4NBr. Method: flow microcalorimetry. DH(K1)=-47.7 kJ
mol-1, DS(K1)=-59 J K-1 mol-1. In 95% (v/v) MeOH/H2O, DH(K1)=-79.5, DS=-80

K+ gl R4N.X 25°C 0.10M C H K1=5.58 1975ANa (98619) 857
Medium: Me4NCl. DH(K1)=-46.0 kJ mol-1, DS=-48.1

K+ oth non-aq -30°C 100% U K1=4.9 1975HBb (98620) 858
Medium: THF

K+ gl R4N.X 25°C 0.05M C I K1=5.4 1975LSc (98621) 859
In 95% MeOH: K1=9.75
****
C18H36N4O4 L (6795)
4,10-Bis(N,N-dimethylpropanamido)-1,7-dioxa-4,10-diazacyclododecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% U H K1=3.03 1990KMb (98781) 860
Medium: MeOH. DH=-30.6 kJ mol-1
****
C18H36O9 L 27-Crown-9 (7043)
1,4,7,10,13,16,19,22,25-Nonaoxacycloheptacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sol non-aq 25°C 100% C K1=4.55 1999KCa (98806) 861
Medium: acetonitrile.

K+ cal alc/w 25°C 100% U H K1=3.47 1993ILa (98807) 862
Medium: MeOH. DH=-43.5 kJ mol-1.
****
C18H37NO4 L (1721)
1-Octyl-1-aza-4,7,10,13-tetraoxacyclopentadecane; C8H17.N(CH2.CH2.O)4.CH2CH2)

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=2.82 1983MKa (98811) 863
****
C18H38N2O6 L CAS 72911-99-0 (1760)
1-Methyl-10-methyldioxyethyl-1,10-Diaza-4,7,13,16-tetraoxa-cyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 95% C K1=4.80 1975LSc (98819) 864
Medium: 95% MeOH
****
C18H38N2O6 L CAS 85726-94-9 (645)
4,10-Dimethoxyethoxyethylidene-1,7-dioxo-4,10-diazacyclododecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sol non-aq 20°C 100% C K1=5.22 1983SLa (98821) 865
Medium: CHCl3
****
C18H38N2O6 L CAS 72911-99-0 (649)
4,13-Bis(2-methoxyethyl)-1,7,10,16-tetraoxo-4,13-diazacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sol non-aq 20°C 100% C K1=5.48 1983SLa (98839) 866
Medium: CHCl3
****
C18H38O9 L Glyme-9 CAS 25990-94-7 (7806)
2,5,8,11,14,17,20,23,26-Nonaoxaheptacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% C K1=9.27 1998KSc (98874) 867
Medium: 1,2-dichloroethane.
****
C19H22O5 L Dibz-16-crown-5 CAS 14696-06-1 (655)
2,3:9,10-Dibenzo-1,4,8,11,14-pentaoxacyclohexadecan-2,9-diene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=3.8 2000KBb (99334) 868
Medium: MeOH. Method: electrospray ionization mass spectrometry.
****
C19H23O6P L (5731)
1,2:8,9-Dibenzo-5-methylphosphinyl-3,7,10,13,16-pentaoxacyclohexadeca-1,8-diene;

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

K+ con non-aq 25°C 100% U K1=3.29 1989TKb (99345) 869
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
****
C19H27NO7 L (7048)
5'-(N-Acrylamide)-benzo-18-crown-6; CH2:CH.CO.NH.C16H23O6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% U K1=7.79 1979KMb (99394) 870
Medium: CHCl3
****
C19H27N3O6 L (2156)
1,10-Diaza-4,7,13,16,21-tetraoxacyclooctadecane-N,N-2,6-pyridinecarboxaldehyde;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp alc/w 25°C 100% U 1977TMa (99397) 871
Keff=5.25
Medium: MeOH
****
C19H30O6 L (643)
2,3-Benzo-8,11,15-trimethyl-1,4,7,10,13,16-hexaoxacyclooctadeca-2-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con alc/w 25°C 100% U K1=3.91 1983LSa (99436) 872
Medium: MeOH
****
C19H31N3O4 L (2158)
1,10-Diaza-4,7,13,16,21-tetraoxacyclooctadecane-N,N-2,6-methylpyridine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp alc/w 25°C 100% U 1977TMa (99446) 873
Keff=4.78
Medium: MeOH
****
C19H32N2O4 L (8540)
1-Benzyl-4,7,13,16-tetraoxa-1,10-diazacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U H K1=3.72 B2= 6.16 1998SSf (99452) 874
Medium: 100% MeOH, 0,05 M Et4NI. By calorimetry DH(K1)=-14.1 kJ mol-1
DH(B2)=-26.0.Many other crown ethers studied
****
C19H38O6 L CAS 83585-72-2 (1675)
2-Octoxymethylene-1,4,7,10,13-pentaoxacyclopentadecane,
2-Octoxymethylene-15-crown-5

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U  I     K1=3.05        1984IEa (99475) 875
Medium: MeOH. In 90% MeOH: K1=2.52
*************************************************************************
C19H39NO5               L                        (1693)
N-n-Heptanyl-1,4,7,10,13-pentaoxa-16-azacyclooctadecane;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         ISE alc/w  25°C  10%  U        K1=4.17   B2=7.38   1986HAa (99478) 876
Medium: 10% MeOH/H2O
*************************************************************************
C19H39N3O5              L                      CAS 60598-00-7  (1537)
4-Methyl-1,4,10-triaza-7,13,16,21,24-pentaoxa-bicyclo[8,8,8]hexacosane;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         gl  R4N.X  25°C 0.10M U        K1=4.2         1978LMa (99492) 877
*************************************************************************
C20H22O4                L                      CAS 82645-28-1  (8945)
o,o'-(Triethyleneglycoldiyl)-(Z)-stilbene;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         con non-aq 25°C 100%  C        K1=ca.4.5      2000ICa (99927) 878
Medium: nitromethane.
*************************************************************************
C20H22O6                L                        (6834)
1,8-Bis(2-Formyphenoxy)-3,6-dioxaoctane; (CH2.O.CH2.CH2.O.C6H4.CHO)2
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=1.9         1993EVa (99931) 879
Medium: THF+CHCl3 (4:1 vol)
*************************************************************************
C20H22O9             H2L                        (5624)
1,7-bis(2-Carboxymethoxyphenyl)-1,4,7-trioxaheptane;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U        K1=3.07        1981PTb (99938) 880
Medium: MeOH
*************************************************************************
C20H24O5                L                        (5620)
5,9-Dimethyl-2,3:11,12-dibenzo-1,4,7,10,13-pentaoxacyclopentadeca-2,11-diene;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  C        K1=0.9    B2=4.0    1981PTa (100045) 881
```

Medium: MeOH. Data for racemic ligand. For meso ligand K1=1.4, B2=4.67

****

C20H24O5 L (5619)

6,8-Dimethyl-2,3:11,12-dibenzo-1,4,7,10,13-pentaoxacyclopentadeca-2,11-diene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	ISE	alc/w	25°C	100%	C		K1=1.4	B2=4.57	1981PTa (100047)	882

Medium: MeOH. Data for racemic ligand

****

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
K+	EMF	alc/w	25°C	100%	C		K1=4.86	2004ZTa (100125)	883

Medium: 100% methanol, 0.05 M Bu4NClO4. Method: Ag electrode, competition with Ag+ ion.

K+	oth	KCl	25°C	0.05M	C		K1=1.74	2002KTa (100126)	884

Method: capillary electrophoresis. Medium: 0.03-0.06 M KCl.

K+	dis	non-aq	24°C	100%	C			2002MRd (100127)	885
							K(K+A+L)=7.04		

Medium: CDCl3. HA is picric acid.

K+	con	non-aq	25°C	100%	C		K1=5.39	2000ICa (100128)	886

Medium: nitromethane.

K+	sp	non-aq	25°C	100%	C		K1=4.9	2000KBb (100129)	887

Medium: MeOH. Method: electrospray ionization mass spectrometry.

K+	oth	alc/w	25°C	3%	U	M		2000MTa (100130)	888
							K(KL+phenolate)=0.55		
							K(KL+o-nitrophenolate)=1.01		
							K(KL+m-nitrophenolate)=0.81		
							K(KL+p-nitrophenolate)=1.12		

Method: CZE. Medium: 3% v/v EtOH/H2O. K(KL+2,4-dinitrophenolate)=1.73, K(KL+picrate)=1.87, K(KL+SCN)=1.40, K(KL+ClO4)=0.60

K+	dis	oth/un	25°C	0.06M	C			2000YYa (100131)	889
							K(KL+A)=1.30		
							K(K+L(org)+A=KLA(org))=4.99		

Method: extraction of metal picrate (0.06 M, pH 12) into dichloromethane/ ligand solution. HA: picric acid. Data for many additional solvents.

K+	sp	mixed	25°C		C	TIH	K1=2.66	1999EDa (100132)	890

In 60 % mass H2O/acetonitrile; For80% H20 K1=2.37, DH1=-6.4 kJ/mol
For 100% acetonitrile K1=4.50 the same at 35 C: 4.42; 40 C: 4.38

K+ oth alc/w 35°C 3.0% C K1=1.66 1999MTd (100133) 891
Method: capillary zone electrophoresis. Medium: 3% v/v EtOH/H20, 0.005 M phosphate buffer, pH 7.0

K+ dis non-aq 25°C 100% U K1=9.36 1998KSb (100134) 892
Medium: 1,2-dichloroethane

K+ oth oth/un 25°C 0.04M C K1=1.67 1998TIa (100135) 893
K(KL+ClO4)=0.54
K(KL+picrate)=1.95
Method: capillary electrophoresis.
Medium: 0.005 M phosphate buffer, pH 7.1, 0.04 M MCl.

K+ sp non-aq 25°C 100% U T H K1=4.50 1997EKa (100136) 894
Medium: CH3CN. Also data for H2O/CH3CN mixtures

K+ sp mixed 10°C 60% C T H K1=2.97 1997EYa (100137) 895
Medium: 60% w/w CH3CN/H2O; For 45 C and 60% CH3CN K1=2.66;
For 80% CH3CN and 10 C K1=3.45; For 45 C and 80% CH3CN K1=3.23

K+ con non-aq 25°C 100% C T H K1=4.78 1997TAa (100138) 896
Medium: acetonitrile. DH(K1)=-20.1 kJ mol-1, DS(K1)=23.8 J K-1 mol-1.
Data for 10-25 C.

K+ vlt non-aq 25°C 100% C K1=6.9 1995KTb (100139) 897
Method: ion transfer polarography. Medium: nitrobenzene, 0.05 M tetrabutylammonium tetraphenylborate.

K+ dis oth/un 25°C 0 U K1=4.68 1994OUa (100140) 898

K+ dis non-aq 23°C 100% C K1=6.6 1992HGb (100141) 899
K(K+A+L(org)=KAL(org))=6.37
Extraction of metal chloride (A) from aqueous solution into nitrobenzene/ 0.01M Bu4NB(Ph)4. Peak potential voltammetry and distribution of 42K.

K+ sp non-aq 25°C 100% U K1=3.17 1991NTa (100142) 900
Medium: DMF

K+ vlt non-aq 23°C 100% C I K1=4.75 1990LUa (100143) 901
Medium: MeCN, 0.05 M Bu4NClO4. Data also in DMF (K1=3.15), DMSO (2.60), benzonitrile (5.15), propylene carbonate (5.06) and other solvents

---

K+ vlt non-aq 25°C 100% U K1=9.9 1990SPa (100144) 902
Medium: 1,2-dichloroethane

K+ cal non-aq 25°C 100% C H K1=4.78 1988BUb (100145) 903
Medium: acetonitrile. DH(K1)=-18.6 kJ mol-1, DS(K1)=29 J K-1 mol-1.

K+ con non-aq 25°C 100% U K1=4.66 1986STb (100146) 904
Medium: THF:CHCl3 4:1 v/v. Metal as 2,4-dinitrophenolate

K+ con mixed 25°C ? U K1=7.16 1984MPa (100147) 905
Medium: 60%(vol) isopropanol+ 20% H2O + 20% CHCl3

K+ ISE alc/w 25°C 100% C K1=4.8 1981PTa (100148) 906
Medium: MeOH

K+ vlt non-aq 25°C 100% U I K1=4.70 1978HKc (100149) 907
Medium: CH3CN, 0.05M Bu4NClO4

K+ nmr non-aq 29°C 100% U K1=3.64 1977SZa (100150) 908
Medium: DMF

K+ sp alc/w 30°C 96% U K1=0.65 1975DBb (100151) 909

K+ dis non-aq 25°C 100% C T HM 1975SIc (100152) 910
K(K+A+L(org)=KAL(org))=4.65
Method: Extraction from H2O into benzene. HA is picric acid. DH(KAL(org))
=-68.2 kJ mol-1, DS(KAL(org))=-140 J K-1 mol-1.

K+ sol none 25°C 0.0 U I K1=1.67 1975SNa (100153) 911

K+ ISE alc/w 25°C 100% A K1=5.00 1971FRa (100154) 912
Medium: MeOH
****
C20H24O6 L CAS 72011-24-6 (8872)
2,3:5,6-Dibenzo-1,4,7,10,13,16-hexaoxacyclooctadeca-2,5-diene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 23°C 100% C K1=6.4 1992HGb (100261) 913
K(K+A+L(org)=KAL(org))=6.19
Extraction of metal chloride (A) from aqueous solution into nitrobenzene/
0.01M Bu4NB(Ph)4. Peak potential voltammetry and distribution of 42K.
****
C20H24O6 L CAS 14262-61-4 (8871)
2,3:8,9-Dibenzo-1,4,7,10,13,16-hexaoxacyclooctadeca-2,8-diene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=2.968 2002YEa (100267) 914
Method: fluorescence spectroscopy. Medium: acetonitrile.

K+ dis non-aq 23°C 100% C K1=5.4 1992HGb (100268) 915
K(K+A+L(org)=KAL(org))=6.25
Extraction of metal chloride (A) from aqueous solution into nitrobenzene/
0.01M Bu4NB(Ph)4. Peak potential voltammetry and distribution of 42K.
****
C20H24O8 H2L (5630)
1-(2-Hydroxyphenyl)-10-(2-carboxymethoxyphenyl)-1,4,7,10-tetraoxadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=2.47 1981PTb (100275) 916
Medium: MeOH
****
C20H26O6 L CAS 84884-14-0 (2236)
2,3-Naphtho-18-crown-6, 2,3-Naphtho-1,4,7,10,13,16-hexaoxacyclooctadeca-2-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% U H 1979KLa (100346) 917
K(K(picrate)+L)=7.93
Medium: CHCl3
****
C20H26O7 L (5626)
1,7-bis(2-Hydroxyethoxyphenyl)-1,4,7-trioxaheptane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=2.23 1981PTb (100351) 918
Medium: MeOH
****
C20H27NO5 L (5296)
2,3:11,12-Dibenzo-1,4,7,10,13-pentaoxa-16-azaoctadeca-2,11-diene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% A K1=3.20 1971FRa (100353) 919
Medium: MeOH
****
C20H27N2O5Cl HL CAS 199472-61-2 (8623)
5-Chloro-7-(1,4,7,10-tetraoxa-13-azacyclopentadec-13-ylmethyl)-8-quinolinol;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal non-aq 25°C 100% C H 1997ZBb (100356) 920
K(K+HL)=3.17
Medium: MeOH. DH(K)=-19.4 kJ mol-1, DS(K)=-4.40 J K-1 mol-1.
****
C20H28N2O4 L (5297)
2,3:11,12-Dibenzo-1,4,10,13-tetraoxa-7,16-diazaoctadeca-2,11-diene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% A K1=1.63 1971FRa (100388) 921
Medium: MeOH
****
C20H28O7 L CAS 123295-30-7 (5571)
14,14-Dimethyl-15,16-(1,4-Benzodioxinic)-1,4,7,10,13-pentaoxacycloheptadeca-15-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 100% U K1=1.40 1989MGb (100399) 922
Medium: MeOH
****
C20H31N2O4F L CAS 173417-87-3 (6461)
26-Fluoro-4,7,13,16-tetraoxa-1,10-diazatricyclo[8.8.7.1,20,24]hexacosa-20,22,24(26)-triene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ EMF non-aq 25°C 100% C H K1=6.71 1999BHa (100440) 923
Medium: MeOH, 0.05 M Et4NClO4. By calorimetry DH(K1)=-39.6 kJ mol-1.
Method: by competition with Ag+, using Ag/Ag+ electrode.
****
C20H32N2O4 L CAS 61696-66-0 (6497)
4,7,13,16-Tetraoxa-1,10-diazatricyclo[8.8.7.1,20,24]hexacosa-20,22,24(26)-triene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ EMF non-aq 25°C 100% C H K1=5.56 1999BHa (100457) 924
Medium: MeOH, 0.05 M Et4NClO4. By calorimetry DH(K1)=-41.5 kJ mol-1.
Method: by competition with Ag+, using Ag/Ag+ electrode.
****
C20H32O6 L CAS 14098-26-1 (5657)
2,3-tert.Butylbenzo-1,4,7,10,13,16-hexaoxacyclooctadeca-2-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=5.12 1982GRc (100489) 925
Medium: MeOH
****
C20H32O7 L AN(MOEOEO)2E (2248)
24-Methoxy-22-methyl-3,6,9,12,15,18-hexaoxabicyclo[18.3.1]-tetracosa-1(24),20,22-triene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% U H 1979KLa (100491) 926
K(K(picrate)+L)=5.26
Medium: CHCl3
****
C20H32O8 L Benzo24-crown-8 (6356)
2,3-Benzo-1,4,7,10,13,16,19,22-Octaoxatetracosa-2-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 22°C 100% U K1=5.96 1987CCc (100496) 927
In deuterochloroform

****
C20H33NO6 L CAS 105495-12-3 (1692)
N-(2-(2-Phenyloxy)ethoxy)ethyl-1,4,7,10-tetraoxa-13-azacyclopentadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 10% U K1=3.64 B2=6.98 1986HAa (100501) 928
Medium: 10% MeOH/H2O
****
C20H34O8 L (2504)
2,5,8,11,14,17,20,23-Octaoxa-12,13-benzotetracosa-12-ene; C6H4(O.(CH2.CH2.O)3.CH3)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=2.83 1975CJa (100525) 929
Medium: MeOH
****
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
---
K+ EMF alc/w 25°C 100% C K1=4.96 2004ZTa (100652) 930
Medium: 100% methanol, 0.05 M Bu4NClO4. Method: Ag electrode,
competition with Ag+ ion.

K+ dis non-aq 25°C 100% U K1=11.72 2000KSa (100653) 931
Medium: 1,2-dichloroethane

K+ dis non-aq 25°C 100% U 1995BSa (100654) 932
K(K(pic)+L=K(pic),L)=8.20
Medium:CHCl3. Data for host-guest associations; pic: picrate. L is a cis-syn
-cis and cis-anti-cis mixture. Also data for syn-L (K=8.27) and anti-L(8.18)

K+ cal non-aq 25°C 100% C H K1=6.19 1988BUb (100655) 933
Medium: acetonitrile. DH(K1)=-29.6 kJ mol-1, DS(K1)=19 J K-1 mol-1.

K+ con none 25°C 0.0 C T H K1=5.53 1988TMc (100656) 934
Data for 15-35 C. DH(K1)=-66.8 kJ mol-1, DS(K1)=-122.8 J K-1 mol-1.
Anion is tetraphenyl borate.

K+ con mixed 25°C ? U K1=6.75 1984MPa (100657) 935
Medium: 20%(vol) isopropanol+ 80% H2O

K+ dis non-aq 25°C 100% U H 1979KLa (100658) 936
K(K(picrate)+L)=8.3
Medium: CHCl3

K+ ISE oth/un 25°C dil A K1=1.78 1971FRa (100659) 937
Isomer B. In MeOH, K1=5.38. For isomer A: K1=2.18; in MeOH: K1=6.01

K+ cal oth/un 40°C 0.0 U T K1=1.50 1971INa (100660) 938
Isomer B. K1(10 C)=1.79, K1(25 C)=1.63. For isomer A: K1=2.15(10 C), 2.02(25 C), 1.91(40 C)

K+ cal oth/un 25°C 0.01M U K1=1.60 1969IRa (100661) 939
Isomer B. For isomer A: K1=2.01
****
C20H38N2O6 L CAS 178822-46-3 (8615)
6-Methylene-4,8,14,17,22,25-hexaoxa-1,11-diazabicyclo[9.8.8]heptacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 80% C H K1=7.08 1995KZa (100739) 940
Medium: 80% v/v CH3OH/H2O. DH(K1)=-54.1 kJ mol-1, DS(K1)=-46.0 J K-1 mol-1
****
C20H38O8 L (617)
3-Hexyl-1,4,7,10,13,16,19-heptaoxacycloheneicosan-2-one, 3-Hexyl-2-one-21-crown-7;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=3.39 1982MKa (100755) 941
Medium: MeOH
****
C20H38O9 L CAS 94618-61-8 (8712)
1,11-Dimethyl-3,6,9,13,16,19,21,24,27-nonaoxabicyclo[9.9.7]heptacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE non-aq 25°C 100% M K1=7.06 1984NMb (100758) 942
Medium: MeOH.
****
C20H40N2O4 L (6625)
1,10-Diaza-4,7,13,16-tetraoxabicyclo[8.8.8]hexacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl non-aq 25°C 100% C I K1=5.09 1992LSc (100775) 943
Medium: MeCN, 0.05 M Et4NClO4. In DMF K1=2.6; in H2O K1<2
****
C20H40N2O6 L Cryptand 2,2,2H (6606)
1,10-Diaza-4,7,14,17,23,26-Hexaoxabicyclo[10.8.8]octacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 95% M K1=5.47 1990LNa (100785) 944
Medium: 95% MeOH, 0.05 M Bu4NBr. For the 12,19-dihydroxy- analogue: K1=5.13
****
C20H40N2O6 L Cryptand 3,2,1H (6589)
1,7-Diaza-4,11,14,17,23,26-hexaoxabicyclo[13.8.5]octacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 95% M K1=3.23 1990LNa (100794) 945
Medium: 95% MeOH, 0.05 M Bu4NBr. For the 9,19-dihydroxy- analogue: K1=3.78
****
C20H40N2O7 L CAS 132162-59-5 (8958)
4,7,10,13,19,22,25-Heptaoxa-1,16-diazabicyclo[14.11.2]nonacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 90% C H K1=4.35 1992DJa (100798) 946
Medium: 90% v/v MeOH/H2O. DH(K1)=-63.2 kJ mol-1, DS(K1)=-129 J K-1 mol-1.
****
C20H40N2O7 L CAS 147900-71-8 (8617)
4,7,10,16,19,22,27-Heptaoxa-1,13-diazabicyclo[11.11.5]nonacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 80% C H K1=3.99 1995KZa (100801) 947
Medium: 80% v/v CH3OH/H2O. DH(K1)=-32.8 kJ mol-1, DS(K1)=-33.6 J K-1 mol-1
****
C20H40N2O7 L Cryptand 3,2,2 CAS 31255-22-8 (1763)
Cryptand 3,2,2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 95% C K1=7.0 1977LSc (100812) 948
Medium: 95% (w/w) MeOH/H2O, 0.1 M Et4NBr.

K+ cal R4N.X 25°C 0.06M C H 1976KLc (100813) 949
Medium: 0.057 M Me4NBr. Method: flow microcalorimetry.
DH(K1)=-13 kJ mol-1, DS(K1)=0 J K-1 mol-1.

K+ gl R4N.X 25°C 0.05M C I K1=2.2 1975LSc (100814) 950
In 95% MeOH: K1=7.0; 100%: > 7
****
C20H40O6 L CAS 103748-82-9 (1672)
2-Octoxymethylene-1,4,7,10,13,16-hexaoxacyclooctadecane,
2-Octoxymethylene-18-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U I K1=5.39 1984IEa (100848) 951
Medium: MeOH. In 90% MeOH: K1=4.7
****
C20H40O10 L 30-Crown-10 (7044)
1,4,7,10,13,16,19,22,25,28-Decaoxacyclotriacontane;

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

---
K+ sol non-aq 25°C 100% C K1=4.62 1999KCa (100851) 952
Medium: acetonitrile.

K+ cal alc/w 25°C 100% U H K1=3.98 1993ILa (100852) 953
Medium: MeOH. DH=-48.7 kJ mol-1.
****
C20H41NO5 L (1714)
N-Octyl-monoaza-18-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=4.87 1983MKa (100856) 954
****
C20H42N2O8 L (6935)
N,N'-Bis(1-hydroxy-2-ethoxyethyl)-1,4-diaza-7,10,13,16-tetraoxacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 90% U IH K1=4.28 1994IZa (100871) 955
L=N,N'-Bis(1-Hydroxy-2-ethoxyethyl)-1,4-diaza-7,10,13,16-tetraoxacycloocta-
decane. Medium: 90% v/v MeOH/H2O. DH(K1)=-37.1 kJ mol-1. Also in 100% MeOH
****
C20H42N4O4 L CAS 39678-14-3 (1543)
4,7-Dimethyl-1,4,7,10-tetraaza-13,16,21,24-tetraoxa-bicyclohexacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE R4N.X 25°C 0.10M U I K1=1.7 1978LMa (100888) 956
In CH3OH, K1>5.0
****
C20H42O5 L CAS 9002-92-0 (8207)
1-Hydroxy-11-oxydodecane-3,6,9-trioxaundecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% C K1=2.31 1999KKb (100901) 957
Medium: MIBK. Method: distribution of metal picrates in H2O/MIBK(ligand)
system. Also data for L= HO(CH2.CH2.O)n.(CH2)11.CH3, n=6 and 8.
****
C20H44N4O4 L CAS 102202-74-4 (6041)
1,4,7,10-Tetra-(2-hydroxypropyl)-1,4,7,10-tetraazacyclododecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ EMF non-aq 25°C 100% C I K1=3.20 1997DMd (100927) 958
Method: Ag electrode; competitive titration. Medium: acetonitrile, 0.05 M
Et4NClO4. Also data for PC (K1=5.2), MeOH (3.5), DMF (3.63), H2O (<2).
****
C20H44N4O4 L (6730)

1,4,7,10-Tetra-(2-methoxyethyl)-1,4,7,10-tetrazacyclododecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	non-aq	25°C	100%	U	I	K1=6.07	1996SDa (100940)	959

Medium: MeCN, 0.05 M Et4NClO4. In MeOH: K1=3.9, DMF: 3.62, propylene carbonate: 6.7

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	C		K1=<2.0	1993SFb (100941)	960

Medium: 0.1 M Et4NClO4.

****

C21H22N3O9F3 L CAS 78857-86-0 (1040)
2",4"-Dinitro-6"-trifluoromethyphenyl-4'-aminobenzo-15-crown-5

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	mixed	25°C	16%	U		K1=2.11 K(K+HL)=1.41	1984BPa (101199)	961

Medium: 16% MeCN/H2O

****

C21H23NO9 L (6799)
2,3-(4'-(4"-Nitrophenoxycarbonyl))benzo-1,4,7,10,13-pentaoxacyclopentadeca-2-ene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	kin	alc/w	25°C	54%	U		K1=0.65	1991HHb (101223)	962

Medium: 54% w/w EtOH/H2O. K1=0.40(39%), 0.60(49%)

****

C21H24O3Si3 L CAS 546-45-2 (1286)
Trimethyl-triphenyl-cyclotrisiloxane; ((CH3)(C6H5)SiO)3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	alc/w	25°C	100%	U		K1=<-0.3	1980OPa (101258)	963

Medium: MeOH, 0.1 M Me4NBr

****

C21H24O8 L CAS 78708-41-5 (799)
2,3:9,10-Dibenzo-1,4,8,11,14-pentaoxacyclohexadeca-2,9-diene-6-oxyethanoic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	C		K1=4.9	2000KBb (101265)	964

Medium: MeOH. Method: electrospray ionization mass spectrometry.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	alc/w	25°C	80%	M	IH	K1=3.11	1985AEb (101266)	965

Medium: 80% w/w MeOH/H2O, pH=11. By calorimtry: DH(K1)=-24.8 kJ mol-1, DS= -20.4 J K-1 mol-1. At pH=3, K(K+HL)=2.23, DH(K+HL)=-30.5, DS(K+HL)=-59.3.

****

C21H26O6 L CAS 88847-18-1 (6847)
Dibenzo-4-methyl-18-crown-6;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% U K1=2.90 1991NTa (101286) 966
Medium: DMF. Data also for 4-ethyl, 4-hexyl and 4,13-dihexyl analogues
****
C21H29NO6 L CAS 83260-79-1 (9010)
2-Methyl-2-(8-quinolyloxy)methyl-15-crown-5;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=4.10 2002NMa (101338) 967
Medium: THF, using metal picrate salt.
****
C21H30O2P2 L (7851)
P'P'-Diphenyl-P,P-dibutylmethylenediphosphinedioxide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C C K1=3.2 1999ESa (101384) 968
In tetrahydrofuran; alkali metal is used as 2,4-dinitrophenolate
****
C21H31O7P3 L CAS 82154-48-1 (2916)
Methyldi((2-dimethylphosphinylmethoxy)phenoxymethyl)phosphineoxide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=3.08 1982YSa (101419) 969
Medium: tetrahydrofuran+CHCl3 4:1(vol); M is 2,4-dinitrophenolate
L=CH3P(O)[CH2OC6H4OCH2P(O)(CH3)2]2
****
C21H33NO7 L CAS 60835-76-9 (1766)
2,3-(4'(N-Butyl)carboxyamidobenzo)-1,4,7,10,13,16-hexaoxacyclooctadeca-2-ene,
R-18-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=4.75 1976UHa (101422) 970
Medium: acetone
****
C21H42N4O6S L CAS 503465-05-2 (9248)
4,12,18,21,26,29-Hexaoxa-1,7,9,15-tetraazabicyclo[13.8.8]hentriacontane-8-thione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 95% C K1=4.89 2004KVa (101463) 971
Medium: 95% MeOH/H2O, 0.01 M Et4NClO4.
****
C21H42O7 L CAS 91318-76-2 (1674)
2-Octyloxyethyleneoxymethylene-1,4,7,10,13-pentaoxacyclopentadecane, R-15-crown-5

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U I K1=3.22 B2=5.63 1984IEa (101477) 972
Medium: MeOH. In 90% MeOH: K1=2.56
****
C22H20N2O4 L CAS 207461-96-9 (8955)
(5Z)-12,13,20,21-Tetrahydrotribenzo[b,f,l][1,8,11,14,4,5]tetraoxadiazacyclohexadeci
ne;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq RT 100% C I K1=2.55 2000GDa (101695) 973
Medium: acetonitrile. In MeOH, K1=2.2.
****
C22H24O8 L CAS 81279-93-8 (5566)
11,12-(1,4-Benzodioxinic)-2,3-benzo-18-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 100% U K1=2.15 1989MGb (101916) 974
Data also for various 14,14-disubstituted analogues
****
C22H25N5O14 L CAS 74305-50-3 (2797)
4'-Picrylamino-(2''-nitrobenzo)-18-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp oth/un 25°C 0.10M U K1=1.70 1980NTa (101919) 975
At pH 12.35 in Li4(EDTA)
****
C22H25O3P L CAS 97745-35-2 (2069)
Adamantyl(diphenoxy)phosphonyl

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sol non-aq 25°C 100% U K1=3.85 1987TCa (101923) 976
Medium: CH2Cl2, 2% MeCN. Metal as picrate
****
C22H26N4O12 L CAS 74044-87-4 (2796)
4'-Picrylaminobenzo-18-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp oth/un 25°C 0.10M U K1=1.92 1980NTa (101991) 977
K(K+HL)=1.62
At pH 11.5 in Li4(EDTA)
****
C22H26O5 L CAS 160978-39-2 (8944)
o,o'-(Tetraethyleneglycoldiyl)-(Z)-stilbene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% C K1=4.25 2000ICa (101997) 978
Medium: nitromethane.
****
C22H26O8 L (5632)
1,4-bis(2-Carboxymethoxyphenyl)-1,4-dioxabutane diethyl ester;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=2.09 1981PTb (102001) 979
Medium: MeOH
****
C22H26O10 H2L (5628)
1,10-bis(2-Carboxymethoxy-phenyl)-1,4,7,10-tetraoxadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=3.21 1981PTb (102008) 980
Medium: MeOH
****
C22H28N2O6 L CAS 449740-17-4 (8937)
N-(2-Pyridylmethylene)-4-aminobenzo-18-crown-6;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C M 2002YPc (102016) 981
K(ZnA2L+K)=4.26
Medium: MeCN, 0.10 M n-Bu4NPF6. A is p-thiocresol.
****
C22H28O6 L CAS 52755-95-0 (5622)
5,9-Dimethyl-2,3:11,12-dibenzo-18-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% C K1=4.37 1981PTa (102029) 982
Medium: MeOH. Data for racemic ligand. For meso ligand K1=4.13
****
C22H28O6 L CAS 34368-73-5 (5621)
6,8-Dimethyl-2,3:11,12-dibenzo-18-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% C K1=4.04 1981PTa (102031) 983
Medium: MeOH. Data for racemic ligand. For meso ligand K1=3.42
****
C22H28O7 L Dibenzo-21-Cr-7 CAS 14098-41-0 (2876)
2,3:11,12-Dibenzo-1,4,7,10,13,16,19-heptaoxacycloheneicosane-2,11-diene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	dis	none	RT	dil	C	M	K1=1.20		2003AGa (102044)	984
							K(K+A+L(org)=KAL(org))=4.65			

Method: extraction of picrate ion pair into dichloromethane. HA is picric acid.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	oth	alc/w	35°C	3.0%	C		K1=1.21		1999MTd (102045)	985

Method: capillary zone electrophoresis. Medium: 3% v/v EtOH/H20, 0.005 M phosphate buffer, pH 7.0

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	dis	oth/un	25°C	0	U		K1=4.09		1994OUa (102046)	986
K+	con	non-aq	25°C	100%	U		K1=5.4		1993EVa (102047)	987

Medium: THF+CHCl3 (4:1 vol)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	cal	non-aq	25°C	100%	C	H	K1=4.19		1986ICa (102048)	988

Medium: MeOH. DH(K1)=-34.6 kJ mol-1, DS(K1)=-35.9 J K-1 mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	ISE	alc/w	25°C	100%	A		K1=4.30		1971FRa (102049)	989

Medium: MeOH

****

C22H28O7 L CAS 133560-78-8 (8962)
2,3:17,18-Dibenzo-1,4,7,10,13,16,19-heptaoxacycloheneicosa-2,17-diene, Dibenzo[21]crown-7;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	sp	non-aq	25°C	100%	C		K1=2.916		2002YEa (102064)	990

Method: fluorescence spectroscopy. Medium: acetonitrile.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	sp	non-aq	25°C	100%	C		K1=4.46		2002YEb (102065)	991

Method: steady state fluorescence spectroscopy. Medium: acetonitrile.

****

C22H29N3O5 L CAS 75897-28-8 (661)
4-Dimethylaminophenylazo-benzo-15-crown-5;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	ISE	alc/w	25°C	100%	C		K1=3.10	B2=6.84	1985ZFa (102083)	992

****

C22H30O4P2 L CAS 470454-09-2 (8993)
4,10-Dibenzyl-1,7-dioxa-4,10-diphosphacyclododecan-4,10-dioxide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values		Reference	ExptNo
K+	dis	non-aq	24°C	100%	C				2002MRd (102130)	993
							K(K+A+L)=5.16			

Medium: CDCl3. HA is picric acid.

****

C22H30O6 L (2506)
2,5,8,13,16,19-Hexaoxa-9,10:11,12-dibenzoeicosa-9,11-diene;
(-C6H4.O.(CH2.CH2.O)2.CH3)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=0.90 1975CJa (102134) 994
Medium: MeOH
****
C22H31N2O6Cl HL CAS 184647-21-0 (8621)
5-Chloro-2-(1,4,7,10,13-pentaoxa-16-azacyclooctadec-16-ylmethyl)-8-quinolinol;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal non-aq 25°C 100% C H 1997ZBb (102139) 995
K(K+HL)=5.42
Medium: MeOH. DH(K)=-52.1 kJ mol-1, DS(K)=-71.1 J K-1 mol-1.
****
C22H31N2O6Cl HL CAS 184647-19-6 (8620)
5-Chloro-7-(1,4,7,10,13-pentaoxa-16-azacylooctadec-16-ylmethyl)-8-quinolinol;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal non-aq 25°C 100% C H 1997ZBb (102143) 996
K(K+HL)=4.47
Medium: MeOH. DH(K)=-40.0 kJ mol-1, DS(K)=-48.7 J K-1 mol-1.
****
C22H32O7P2 L (2078)
1,5-Bis(2-(dimethylphosphinylmethoxy)phenoxy)-3-oxapentane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=3.93 1989KSa (102206) 997
Medium: tetrahydrofuran/CHCl3 4:1 (vol)
****
C22H32O8 L CAS 123295-31-8 (5572)
17,17-Dimethyl-18,19-(1,4-Benzodioxinic)-1,4,7,10,13,16-hexaoxacyclocosa-18-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 100% U K1=2.72 1989MGb (102209) 998
Medium: MeOH
****
C22H36N2O6 L Bz-Cryptand 222 CAS 31250-18-7 (2269)
5,6-Benzo-4,7,13,16,21,24-hexaoxa-1,10-diazabicylo[8:8:8]hexacosa-5-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl R4N.X 25°C 0.05M U H K1=5.1 1998DBa (102274) 999
Medium: 0.05 M Et4NClO4. By calorimetry: DH(K1)=-38.3 kJ mol-1,

---
K+ gl oth/un 25°C 0.02M U H K1=4.21 1980CKa (102275)1000
DH=-65.3 kJ mol-1. Alternative method, calorimetry
****
C22H36O9 L Benzo-27-Crown9 CAS 63144-76-3 (2842)
2,3-Benzo-1,4,7,10,13,16,19,22,25-nonanoxacycloheptacosa-2-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 22°C 100% U K1=6.26 1987CCc (102299)1001
In deuterochloroform
****
C22H37NO7 L CAS 105495-13-4 (1691)
N-(2-(2-Phenyloxy)ethoxy)ethyl-1,4,7,10,13-pentaoxa-16-azacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 10% U K1=4.78 B2=8.74 1986HAa (102305)1002
Medium: 10% MeOH/H2O
****
C22H40O6 L CAS 76993-47-0 (2340)
2,5,8,11,14,17-Hexaoxatricyclo[22.4.0.0(18,23)]octacosane (trans-cis-trans isomer)

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ nmr non-aq 24°C 100% U M 1981BEb (102370)1003
K(K(picrate)+L)=8.6
Medium: CDCl3
****
C22H40O7 L (6596)
2,3,11,12,-Dicyclohexano-1,4,7,10,13,16,19-heptaoxacycloheneicosane;
dicyclohexyl-21-crown-7;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sol non-aq 25°C 100% C I K1=4.98 1999KCa (102379)1004
Medium: acetonitrile. In propylene carbonate, K1=4.73
****
C22H44N2O7 L Cryptand 3,2,2H (6607)
1,10-Diaza-4,7,14,17,20,26,29-Heptaoxabicyclo[13.8.8]hentriacontane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 95% M K1=5.15 1990LNa (102415)1005
Medium: 95% MeOH, 0.05 M Bu4NBr. For the 12,22-dihydroxy- analogue: K1=5.63
****
C22H44N2O8 L Cryptand 4,2,2 (7304)
1,10-Diaza-4,7,13,16,21,24,27,30-octaoxabicyclo[8,8,14]dotricontane;

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

---
K+ cal alc/w 25°C 95% U H K1=5.5 1997ZIa (102421)1006
Medium: 95% v/v MeOH/H2O, 0.1 M. DH(K1)=-37.8 kJ mol-1, DS=-21.5 J K-1 mol-1
****
C22H44N2O8 L Cryptand 3,3,2 CAS 132162-57-3 (1762)
Cryptand 3,3,2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 100% C I K1=6.0 1975LSc (102428)1007
Medium: MeOH
****
C22H44N6O5S2 L CAS 503465-08-5 (9241)
9,20,23,28,31-Pentaoxa-1,4,6,12,14,17-hexaazabicyclo[15.8.8]tritriacontane-5,13-dithione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 95% C K1=3.84 2004KVa (102438)1008
Medium: 95% MeOH/H2O, 0.01 M Et4NClO4.
****
C22H44O11 L 33-Crown-11 (7045)
1,4,7,10,13,16,19,22,25,28,31-Undecaoxacyclotritriacontane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% U H K1=3.16 1993ILa (102443)1009
Medium: MeOH. DH=-48.9 kJ mol-1.
****
C22H45NO4 L CAS 75006-56-3 (1717)
N-Dodecyl-monoaza-15-crown-5

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U I K1=2.86 1983MKa (102445)1010
****
C22H45NO6 L CAS 75006-58-5 (1720)
N-(Octyl-di(oxyethylene))-monoaza-15-crown-5

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=3.58 1983MKa (102447)1011
****
C22H46N2O4 L CAS 69703-24-8 (2449)
N,N'-Bis(2-dimethylpropane)-cyclo-1,10-diaza-4,7,13,16-tetraoxaoctadecane)

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 93% U K1=2.4 1978WVa (102451)1012
Medium: 93% MeOH/H2O

****
C22H46N2O8 L CAS 85726-96-1 (647)
4,10-Dimethyloxyethoxyethoxyethylidene-1,7-dioxo-4,10-diazacyclododecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sol non-aq 20°C 100% C K1=5.46 1983SLa (102454)1013
Medium: CHCl3
****
C22H46N2O8 L CAS 85726-97-2 (650)
4,13-Dimethyloxyethoxyethylidene-1,7,10,16-tetraoxo-4,13-diazaoctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sol non-aq 20°C 100% C K1=5.63 1983SLa (102457)1014
Medium: CHCl3
****
C22H46N4O8 L CAS 61136-93-4 (8201)
7,9-Dimethyl-4,10,16,22,27-pentaoxa-1,7,13,19-tetraazabicyclo[11.11.5]nonacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl R4N.X 25°C 0.10M U K1=1.3 1982GKc (102460)1015
Medium: 0.10 M NMe4NO3.
****
C22H48N6O2 L CAS 39678-22-3 (1542)
4,7,13,16-Tetramethyl-1,4,7,10,13,16-hexaaza-21,24-dioxabicyclohexacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE R4N.X 25°C 0.10M U I K1=1.7 1978LMa (102487)1016
****
C23H22N4O4 HL CAS 207800-89-3 (8966)
19,20,22,23-Tetrahydro-9-methyl-11,7-metheno-7H-dibenzotrioxatetraazacycloeicosin-2
5-ol;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp diox/w 25°C 50% C I K1=0.73 2001INa (102644)1017
Medium: 50% v/v dioxane/H2O, 3% v/v triethylamine, pH 12. In 50%
v/v dioxane/H2O with Et4NOH, K1=1.91.
****
C23H23NO5 L CAS 218619-58-0 (7808)
Dibenzo-pyridino-18-crown-6;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ EMF alc/w 25°C 100% C K1=4.15 2004ZTa (102658)1018
Medium: 100% methanol, 0.05 M Bu4NClO4. Method: Ag electrode,
competition with Ag+ ion.

K+ con non-aq 25°C 100% C T H K1=4.06 1997TAa (102659)1019
Medium: acetonitrile. DH(K1)=-18.6 kJ mol-1, DS(K1)=15.5 J K-1 mol-1.
Data for 10-25 C.
****
C23H30N2O4 L CAS 361454-16-2 (8960)
N-(Phenylmethylene)-4-(1,4,7,10-tetraoxa-13-azacyclopentadec-13-yl)benzamine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq RT 100% C K1=2.40 2001AVa (102750)1020
Method: spectrophotometric titration. Medium: acetonitrile.
****
C23H32N2O5 L (7368)
9-(2'-Hydroxy-5'-methylbenzyl)-3,6,12,15-Tetraoxa-9,21-diazabicyclo[15.3.1]heneicos
atriene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% U H K1=3.53 1997ZBa (102781)1021
Medium: MeOH. Data also for several similar 5'-substituted ligands
****
C23H32N2O5 L (7369)
9-(2'-Pyridylmethyl)-3,6,12,15-tetraoxa-19-methyl-21-hydroxy-9-azabicyclo[15.3.1]he
neicosatriene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% U H K1=3.00 1997ZBa (102785)1022
Medium: MeOH
****
C23H33N2O6Cl L CAS 184647-23-2 (8622)
5-Chloro-8-methoxy-2-(1,4,7,10,13-pentaoxa-16-azacyclooctadec-16-ylmethyl)-quinolin
e;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal non-aq 25°C 100% C H K1=5.64 1997ZBb (102795)1023
Medium: MeOH. DH(K)=-45.8 kJ mol-1, DS(K)=-45.6 J K-1 mol-1.
****
C23H41N2O10 HL CAS 111216-09-2 (5567)
2-Carboxy-3-monopiperidinenitroxide-18-crown-6 derivative;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ nmr alc/w 25°C 90% U K1=3.8 1987DDa (102835)1024
Medium: 90% MeOH/H2O
****
C23H42N2O9 HL CAS 111216-12-7 (5568)
2-Carboxy-3-monopiperidine-18-crown-6 derivative;

```
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         nmr alc/w  25°C  90%  U        K1=5.0         1987DDa (102840)1025
Medium: 90% MeOH/H2O
********************************************************************************
C23H46O8                L                      CAS 91318-80-8  (1673)
2-Octyl-di(oxyethylene)-oxymethylene-1,4,7,10,13-pentaoxacyclopentadecane,
R-15-crown-5
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U  I     K1=3.28   B2=5.48   1984IEa (102842)1026
Medium: MeOH. In 90% MeOH: K1=2.71
********************************************************************************
C23H46O8                L                      CAS 91318-78-4  (1671)
2-Octyl-oxyethylene-oxymethylene-1,4,7,10,13,16-hexaoxacyclooctadecane,
R-18-crown-6
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U  I     K1=5.64        1984IEa (102844)1027
Medium: MeOH. In 90% MeOH: K1=4.8
********************************************************************************
C24H20B-                HL                     CAS 4358-26-3  (2489)
Tetraphenylborate;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  C T      K1=2.38        1999VMa (102895)1028
Medium: 2-methoxyethanol. Data for 15-35 C.
--------------------------------------------------------------------------------
K+         sol none   25°C  0.0  U  I                    1979LPf (102896)1029
                                          Kso(KB(C6H5)4)=-7.33
Method: spectrophotometry. Also data for 10-100% w/w MeOH/H2O.
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=0.40        1978CAa (102897)1030
Medium: Acetonitrile
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=1.02        1976RMa (102898)1031
Medium: 3-methylsulfonate
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=0.3         1975YKa (102899)1032
Medium: MeCN
********************************************************************************
C24H24N2O4              L                       (5741)
1,10-Di(8-quinolyl)-1,4,7,10-tetraoxadecane; C9H6N.O.C2H4.O.C2H4.O.C2H4.O.C9H6N
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
```

K+ con non-aq 25°C 100% U K1=5.2 1989BEa (102937)1033
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
****
C24H24O6 L CAS 99700-19-3 (8873)
2,3:5,6:8,9-Tribenzo-1,4,7,10,13,16-hexaoxacyclooctadeca-2,5,8-triene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 23°C 100% C K1=5.7 1992HGb (102952)1034
Extraction of metal chloride (A) from aqueous solution into nitrobenzene/
0.01M Bu4NB(Ph)4. Peak potential voltammetry and distribution of 42K.
****
C24H24O6 L TriBz18-Crown-6 (6069)
2,3:8,9:11,12-Tribenzo-1,4,7,10,13,16-hexaoxacyclooctadeca-2,8,11-triene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 23°C 100% C K1=5.4 1992HGb (102958)1035
K(K+A+L(org)=KAL(org))=5.24
Extraction of metal chloride (A) from aqueous solution into nitrobenzene/
0.01M Bu4NB(Ph)4. Peak potential voltammetry and distribution of 42K.
****
C24H25O7P L (2067)
Phenylphosphonyldibenzo-17-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sol non-aq 25°C 100% U K1=2.89 1987TCa (102964)1036
Medium: CH2Cl2, 2% MeCN
****
C24H26N2O6 HL (664)
2-Hydroxynaphthylazo-benzo-15-crown-5;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% C K1=3.25 B2=6.98 1985ZFa (102969)1037
****
C24H30O7 HL (6603)
2-[(7,8,16,17-Tetrahydro-6H,15H-dibenzo[1,4,8,11]tetraoxacyclotetradeca-7-yl)oxy)-h
exanoic acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis oth/un 25°C ? U K1=1.97 1991BUa (103032)1038
****
C24H30O8 L CAS 67655-22-5 (8710)
7,8,16,17-Tetrahydro-7,16-(epoxyethanoxyethanoxyethanoxy)-6H,15H-dibenzotetraoxacyc
lotetradecin;

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

---
K+ ISE none 25°C 0.0 C K1=5.7 1978PAa (103034)1039
Method: K-sensitive electrode.
****
C24H30O9 L (5625)
1,7-bis(2-Carboxymethoxyphenyl)-1,4,7-trioxaheptane diethylester;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=2.79 1981PTb (103037)1040
Medium: MeOH
****
C24H32O6 L ANAN(MOEO)2E (2242)
2,3:4,5-Di(1,3-(2-methoxy-5-methylbenzo))-9,12,15,18-tetraoxacyclooctadeca-2,4-dien
e;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% U H 1979KLa (103070)1041
K(K(picrate)+L)=7.20
Medium: CHCl3
****
C24H32O6 L AN(MOEOM)2AN (2244)
23,24-Dimethoxy-10,21-dimethyl-3,6,14,17-tetraoxatricyclo-tetracosa-1(23),8(24),9,1
1,19,21hexaene

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% U H 1979KLa (103076)1042
K(K(picrate)+L)=3.59
Medium: CHCl3
****
C24H32O6 L DP(OEOEO)2E CAS 60985-77-5 (2237)
3,4:5,6-Bis(2-methylbenzo)-2,7,10,13,16,19-hexaoxacyclodocosa-3,5-diene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% U H 1979KLa (103082)1043
K(K(picrate)+L)=6.23
Medium: CHCl3
****
C24H32O8 L (5617)
2,3:11,12-Dibenzo-1,4,7,10,13,16,19,22-octaoxacyclotetracosa-2,11-diene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ oth alc/w 25°C 100% U K1=3.45 1980WAa (103087)1044
Medium: MeOH
****
C24H32O8 L DiBz-24-Crown-8 CAS 14174-09-5 (580)

2,3:14,15-Dibenzo-1,4,7,10,13,16,19,22-octaoxacyclotetracosa-2,14-diene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	dis	none	RT	dil	C	M	K1=0.95 K(K+A+L(org)=KAL(org))=4.52	2003AGa (103130)	1045

Method: extraction of picrate ion pair into dichloromethane. HA is picric acid.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	oth	KCl	25°C	0.05M	C		K1=0.63	2002KTa (103131)	1046

Method: capillary electrophoresis. Medium: 0.03-0.06 M KCl.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	C		K1=2.62	2002YEb (103132)	1047

Method: steady state fluorescence spectroscopy. Medium: acetonitrile.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	C	TIH	K1=3.70	1999RMb (103133)	1048

Medium: 100% MeOH. Data for 15-55 C. Also data for DMF/MeOH mixtures. DH(K1)=-27.4 kJ mol-1, DS(K1)=-22.3 J K-1 mol-1. In 100% DMF, K1=1.83.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	dis	oth/un	25°C	0	U		K1=3.49	1994OUa (103134)	1049

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=5.3	1993EVa (103135)	1050

Medium: THF+CHCl3 (4:1 vol)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	vlt	non-aq	25°C	100%	U		K1=10.4	1990SPa (103136)	1051

Medium: 1,2-dichloroethane

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	non-aq	25°C	100%	C	H	K1=3.45	1986ICa (103137)	1052

Medium: MeOH. DH(K1)=-31.1 kJ mol-1, DS(K1)=-38.3 J K-1 mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=3.53	1983GGa (103138)	1053

Medium: MeOH

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	dis	non-aq	35°C	100%	U	I	K1=3.7	1980TYb (103139)	1054

Medium: propylene carbonate

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	alc/w	25°C	70%	U	H	K1=2.42	1976ITa (103140)	1055

Medium: 70% w/w MeOH/H2O. DH(K1)=-35.7 kJ mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	A		K1=3.49	1971FRa (103141)	1056

Medium: MeOH

****

C24H32O8 L CAS 75832-82-5 (5618)

2,3:8,9-Dibenzo-1,4,7,10,13,16,19,22-octaoxacyclotetracosa-2,8-diene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	C		K1=3.730	2002YEa (103183)	1057

Method: fluorescence spectroscopy. Medium: acetonitrile.

K+ oth alc/w 25°C 100% U K1=3.85 1980WAa (103184)1058
Medium: MeOH
****
C24H33N3O7 L (662)
4-Dihydroxyethylaminophenylazo-benzo-15-crown-5;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% C K1=3.28 B2=6.77 1985ZFa (103199)1059
****
C24H34N2O5 L CAS 182926-58-5 (8848)
7,13-Bis(2-methoxyphenyl)-1,4,10-trioxa-7,13-diazacyclopentadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp alc/w RT 50% C K1=<2.3 2002GLb (103209)1060
Medium: 50% MeOH/H2O, pH 7.4 (0.1 M Tris buffer), 0.1 M Me4NCl.
****
C24H34O5P2 L CAS 470454-11-6 (8994)
7,13-Dibenzyl-1,4,10-trioxa-7,13-diphosphacyclopentan-7,13-dioxide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 24°C 100% C 2002MRd (103231)1061
K(K+A+L)=5.24
Medium: CDCl3. HA is picric acid.
****
C24H34O7 L CAS 20740-88-9 (5612)
1,17-Diphenoxy-3,6,9,12,15-pentaoxaheptadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 100% M K1=1.57 1976FAa (103235)1062
****
C24H34O10 HL CAS 143585-81-3 (7847)
1-Methyl-1,4,7,10,13,16-hexaoxacycloeicosino[18,19-b][1,4]benzodioxin-1-propanoic
acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE non-aq 25°C 100% U K1=3.54 1992BCe (103238)1063
K(K+HL)=2.73
K(KL+H)=8.81
Medium: methanol. Method: glass/K+ and glass/H+ electrodes.
Data for many structurally related macrocycles and linear analogues.
****
C24H35NO9 L CAS 330462-64-1 (8032)
6,7-Dimethoxy-4-(1,4,7,10,13-pentaoxa-16-azacyclooctadec-16-ylmethyl)-2H-1-benzopyr
an-2-one;

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  mixed  25°C  10%  C        K1=4.41        2001LWa (103242)1064
Method: fluorimetry. Medium: 10%v/v acetonitrile/H2O.
*************************************************************************
C24H36N2O4Fe            L                     CAS 145519-34-2  (6831)
1,1'-(1,4,10,13-Tetraoxa-7,16-diazacyclooctadeca-7,16-diyldimethylferrocene;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         nmr non-aq 25°C 100%  U        K1=5.13        1992MGa (103255)1065
Method:NMR. Medium: MeCN, 0.1 M Bu4NPF6.  Data also for other ferrocene[2.2]
cryptands. In MeOH K=3.77
*************************************************************************
C24H36O6                L                       (1703)
Decalino-benzo-18-crown-6
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         ISE alc/w  25°C    ?  U        K1=5.55        1983KTa (103290)1066
*************************************************************************
C24H36O9                L                       (5573)
20,20-Dimethyl-21,22-(1,4-Benzodioxinic)-1,4,7,10,13,16,19-heptaoxacyclotricos-21-e
ne;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         gl  alc/w  25°C 100%  U        K1=2.85        1989MGb (103292)1067
Medium: MeOH
*************************************************************************
C24H36O10P2             L                       (5726)
1,4-Bis(2-(diethoxyphosphinylmethoxy)phenyl)-1,4-dioxabutane;
2(EtO)2PO.CH2O.C6H4.O.CH2)2
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=3.7         1989EVa (103295)1068
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
*************************************************************************
C24H36O18            H4L                      (8196)
2,3,11,12-Tetrakis[N-(carboxymethyl)carbamoyl]-1,4,7,10,13,16-hexaoxacyclooctadecan
e;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         ISE oth/un 25°C 0.10M C        K1=2.81        1982BLc (103299)1069
Method: K ion selective electrode. Medium: 0.10 M Tris buffer, pH 7.0
Data for a large range of 2,3,11,12-substituted derivatives.
*************************************************************************
C24H36O21            H6L                     CAS 71735-94-9  (7414)
```

1,4,7,10,13,16,19,22,25-Nonaoxacycloheptacosane-2,3,11,12,20,21-hexacarboxylic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	M		K1=2.9 B(KHL)=8.3	1991FGb	(103308)1070

Medium: 0.10 M Et4NNO3.

****

C24H42N2O6 L CAS 129242-36-0 (8616)
6,16,25-Tris(methylene)-4,8,14,18,23,27-hexaoxa-1,11-diazabicyclo[9.9.9]nonacosane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	alc/w	25°C	80%	C	H	K1=3.60	1995KZa	(103354)1071

Medium: 80% v/v CH3OH/H2O. DH(K1)=-43.5 kJ mol-1, DS(K1)=-77.2 J K-1 mol-1

****

C24H42O6 L CAS 88692-14-2 (1705)
Decalino-cyclohexano-18-crown-6

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	?	U		K1=5.95	1983KTa	(103391)1072

****

C24H42O10 L (2505)
2,5,8,11,14,17,20,23,26,29-Decaoxa-15,16-benzo-triconta-15-ene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	22°C	100%	U		K1=6.58	1987CCc	(103395)1073

In deuterochloroform

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=3.30	1975CJa	(103396)1074

Medium: MeOH

****

C24H44N4O10 L CAS 57207-22-4 (8203)
N,N,N',N',N",N",N"',N"'-Octamethyl-1,4,7,10,13,16-hexaoxacyclooctadecane-2,3,11,12-tetracarboxami

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	R4N.X	25°C	0.10M	U		K1=1.85	1976BLb	(103403)1075

Method: K ion selective electrode. Medium: 0.10 M (Me4N)H2PO4, pH 7.0
Data for related N-substituted amides with K, NH4 and alkylammonium ions.

****

C24H44O5 L (2341)
16,18,23,25-Tetramethyl-2,5,8,11,14-pentaoxatricyclo(22.4.0.0(15,20))pentacosane;

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

K+ nmr non-aq 24°C 100% U M 1981BEb (103409)1076
K(K(picrate)+L)=7.1
Medium: CDCl3
****
C24H44O8 L Dicy-24-crown-8 CAS 17455-23-1 (2401)
2,3,14,15-Dicyclohexyl-1,4,7,10,13,16,19,22-octaoxacyclotetracosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sol non-aq 25°C 100% C K1=5.10 1999KCa (103430)1077
Medium: acetonitrile. In propylene carbonate, K1=4.79
****
C24H48N2O9 L BOA15C5 CAS 31255-19-3 (6119)
3-Oxa-1,5-bis-(1-aza-4,7,10,13-tetraoxacyclopentadecyl)pentane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 90% U K1=4.75 B2=7.82 1988HKa (103458)1078
Medium: 90% w/w MeOH/H2O
****
C24H48N2O9 L Cryptand 3,3,3 CAS 132162-61-9 (1761)
Cryptand 3,3,3

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 100% C I K1=5.4 1975LSc (103464)1079
Medium: MeOH
****
C24H48N4O6 L CAS 56698-26-1 (1536)
4,10,16,22,27,32-Hexaoxa-1,7,13,19-tetraazatricyclo-tetratriacontane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl R4N.X 25°C 0.10M U K1=3.42 1982GKc (103483)1080
Medium: 0.10 M NMe4NO3.

K+ gl R4N.X 25°C 0.10M U K1=3.4 1981GLa (103484)1081

K+ kin non-aq 25°C 100% C K1=5.85 1977LSc (103485)1082
Medium: 0.10 M Et4NBr in MeOH.
****
C24H48N6O6S2 L CAS 503465-10-9 (9242)
9,12,23,26,31,34-Hexaoxa-1,4,6,15,17,20-hexaazabicyclo[18.8.8]hexatricontane-5,16-dithione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 95% C K1=3.87 2004KVa (103505)1083
Medium: 95% MeOH/H2O, 0.01 M Et4NClO4.
****

C24H48N7O5P3 L CAS 254441-66-2 (7955)
2,5,8,11,14-Pentaoxa-16,18,19-triaza-1,15,17-triphosphabicyclo[13.3.1]nonadeca-1,15
,17-triene,17,

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	EMF	R4N.X	RT	0.10M	M		K1=1.02	2001BSb	(103512)1084

Method: Ag/Ag+ electrode. Medium: 0.10 M Et4NNO3.

****

C24H48O12 L 36-Crown-12 (7046)
1,4,7,10,13,16,19,22,25,28,31,34-Dodecaoxacyclohexatriacontane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	alc/w	25°C	100%	U	H	K1=3.03	1993ILa	(103520)1085

Medium: MeOH. DH=-50.3 kJ mol-1.

****

C24H49NO5 L CAS 86181-93-3 (1709)
N-Dodecyl-monoaza-18-crown-6

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U	I	K1=4.98	1983MKa	(103522)1086

****

C24H49NO7 L CAS 75006-62-1 (1713)
N-(Octyl-di-(oxyethylene))-monoaza-18-crown-6

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=5.73	1983MKa	(103524)1087

****

C24H49NO7 L CAS 86170-86-7 (1719)
N-(Octyl-tri(oxyethylene))-monoaza-15-crown-5

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=4.57	1983MKa	(103526)1088

****

C24H50N2O6 L CAS 85726-95-0 (646)
4,10-Dibutoxyethoxyethylidene-1,7-dioxo-4,10-diazacyclododecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sol	non-aq	20°C	100%	C		K1=5.57	1983SLa	(103528)1089

Medium: CHCl3

****

C24H72O12Si12 L CAS 18919-94-3 (1287)
Tetracosamethyl-cyclododecasiloxane; ((CH3)2SiO)12

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

---
K+ con alc/w 25°C 100% U K1=0.39 1980OPa (103591)1090
Medium: MeOH, 0.1 M Me4NBr
****
C25H19N3O2 L (2157)
2,6-(Di-(8-methoxyquinolyl)-pyridine; C9H6N.O.CH2.C5H3N.CH2.O.C9H7N

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp alc/w 25°C 100% U K1=2.75 B2=4.75 1977TMa (103595)1091
Medium: MeOH
****
C25H22O2P2 L CAS 207-21-8 (2099)
Methylenebis(diphenylphosphine oxide); Ph2P(O)CH2P(O)Ph2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C C K1=3.7 1999ESa (103629)1092
In tetrahydrofuran; alkali metal is used as 2,4-dinitrophenolate
---
K+ con non-aq 25°C 100% U K1=3.5 1984YKa (103630)1093
Medium: tetrahydrofuran + CHCl3 4:1, K as 2,4-dinitrophenolate
****
C25H26N4O5 HL CAS 207800-93-9 (8967)
19,20,22,23,25,26-Hexahydro-9-methyl-11,7-metheno-7H-dibenzotetraoxatetraazacyclotr
icosin-28-ol

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp diox/w 25°C 50% C K1=1.17 2001INa (103651)1094
Medium: 50% v/v dioxane/H2O, 3% v/v triethylamine, pH 12.
****
C25H30N3O5Cl HL CAS 172033-66-8 (8619)
5-Chloro-2-(3,6,12,15-tetraoxa-9,21-diazabicycloheneicosa-1,17,19-trien-9-ylmethyl-
8-quinolinol;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal non-aq 25°C 100% C H 1997ZBb (103686)1095
K(K+HL)=5.16
Medium: MeOH. DH(K)=-38.8 kJ mol-1, DS(K)=-31.4 J K-1 mol-1.
****
C25H30N3O5Cl HL CAS 172033-54-4 (8618)
5-Chloro-7(3,6,12,15-tetraoxa-9,21-diazabicycloheneicosa-1,17,19-trien-9-ylmethyl)-
8-quinolinol;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal non-aq 25°C 100% C H 1997ZBb (103690)1096
K(K+HL)=4.01

Medium: MeOH. DH(K)=-28.3 kJ mol-1, DS(K)=-18.2 J K-1 mol-1.
****
C25H32O8 HL (6604)
2-[(6,7,9,10,18,19-Hexahydro-17H-dibenzo[1,4,7,10,13]pentaoxacyclohexadeca-18-yl]oxyhexanoic acid
---
Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	dis	oth/un	25°C	?	U		K1=2.05	1991BUa (103748)	1097

****
C25H37N2O7P L CAS 202407-79-2 (8035)
26,27-Dimethoxy-3,7,24-triMe-11,14,17,20-tetraoxa-2,4-diaza-phosphatricycloheptacosahexaeneoxide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	dis	non-aq	20°C	100%	C		K(KP+L)=4.23	1998DDc (103757)	1098

Medium: CHCl3. P is picrate.
****
C25H40O12 L CAS 239470-22-5 (8948)
4'-Carboxybenzo-30-crown-10;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	C T H		K1=5.31	1999RGa (103775)	1099

Medium: acetonitrile. Data for 5-35 C. DH(K1)=-67.2 kJ mol-1, DS(K1)=
-125 J K-1 mol-1.
****
C25H50N2O8 L BCA15C5 CAS 71972-29-7 (6116)
1,5-Bis-(1-aza-4,7,10,13-tetraoxacyclopentadecyl)pentane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	90%	U		K1=2.69	1988HKa (103829)	1100

Medium: 90% w/w MeOH/H2O
****
C25H50N4O5 L CAS 61136-92-3 (1535)
Pentaoxa-4,10,16,22,27-tetraaza-1,7,13,19-tricyclo-tetratriacontane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	U		K1=2.5	1981GLa (103835)	1101

****
C25H50N4O8S L CAS 503465-06-3 (9249)
4,7,15,18,24,27,32,35-Octaoxa-1,10,12,21-tetraazabicyclo[19.8.8]heptatriacontane-11-thione;

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

K+ gl alc/w 25°C 95% C K1=5.90 2004KVa (103844)1102
Medium: 95% MeOH/H2O, 0.01 M Et4NClO4.
****
C25H50O9 L CAS 91318-82-0 (1670)
2-Octyl-di(oxyethylene)-oxymethylene-1,4,7,10,13,16-hexaoxacyclooctadecane,R-18-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U I K1=5.50 1984IEa (103849)1103
Medium: MeOH. In 90% MeOH: K1=4.8
****
C26H24N4O5 L CAS 188838-26-8 (7359)
Dipyrido[3,2-a:2',3'-c]-phenazo-(1,4,7,10,13-pentaoxacyclopentadecane);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% U I M 1997YLa (103899)1104
K(Ru(II)(bpy)2L+K)=2.28
Medium: CH3CN;0.1M NBu4PF6. In (CH3)2CO: K=2.13. Data also for
bis(4,4'-di-tert-butylbipyridyl) and bis(phenanthroline) RuL complexes.
****
C26H24O2P2 L (6648)
Bis(diphenylphosphinyl)ethane; (C6H5)2PO.CH2CH2.PO(C6H5)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=2.1 1990EAb (103911)1105
Medium: THF+CHCl3 4:1(vol). Metal as 2,4-dinitrophenolate
****
C26H24O3P2 L (7158)
1,3-Bis(diphenylphosphinyl)-2-oxopropane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C C K1=2.7 1999TEa (103917)1106
In: tetrahydrofurane/CHCl3 4:1 v/v

K+ oth non-aq 25°C 100% U K1=2.7 1995TEa (103918)1107
Medium: tetrahydrofurane:CHCl3 4:1 (v/v).
Metal ion is used as 2,4-dinitrophenolate.
****
C26H28N2O5 L (2155)
1,13-Di-(8-quinolyl)-1,4,7,10,13-tetraoxatridecane; C9H6N.O.(CH2.CH2.O)4.C9H6N

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp alc/w 25°C 100% U K1=3.51 B2=5.92 1977TMa (103978)1108
Medium: MeOH
****

C26H34N4 L CAS 677034-80-9 (9063)
1-(2-{10-[2-Piperazinoethyl]-9-anthryl}ethyl)piperazine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=3.80 2003GHa (104074)1109
K(KL+K)=2.71
Method: fluorescence spectroscopy. Medium: acetonitrile, 0.05 M Et4NClO4.
****
C26H34O9 L CAS 67655-23-6 (8711)
7,8,16,17-Tetrahydro-7,16-(epoxyethanoxyethanoxyethanoxyethanoxy)-dibenzotetraoxacyclotetradecin;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE none 25°C 0.0 C K1=4.3 1978PAa (104108)1110
Method: K-sensitive electrode.
****
C26H34O10 L (5629)
1,10-bis(2-Carboxymethoxyphenyl)-1,4,7,10-tetraoxadecane diethyl ester;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=3.42 1981PTb (104111)1111
Medium: MeOH
****
C26H35N3O5 HL CAS 254900-33-9 (8919)
7-(10-Hydroxybenzoquinoline-9-ylmethyl)-1,4,10,13-tetraoxa-7,16-diazacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% C H 1999SBg (104116)1112
K(K+HL)=3.52
Medium: MeOH. DH(K)=-31.2 kJ mol-1, DS(K)=-37.3 J K-1 mol-1.
****
C26H36N2O6 L DiBzCryptand222 (746)
5,6,14,15-Dibenzo-4,7,13,16,21,24-hexaoxa-1,10-diazabicyclo[8.8.8]hexacosan-5,14-diene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl R4N.X 25°C 0.05M U H 1998DBa (104133)1113
Medium: 0.05 M Et4NClO4. By calorimetry: DH(K1)=-36.7 kJ mol-1,
---
K+ cal non-aq 25°C 100% U IH 1988DSa (104134)1114
Medium: MeCN. DH(K1)=-71.3 kJ mol-1. Also data in propylene carbonate, dimethylformamide and dimethylsulphoxide
---
K+ ISE non-aq 25°C 100% U M K1=6.10 1987DSa (104135)1115

Medium: N,N-dimethylformamide

K+ ISE alc/w 25°C 100% C I K1=8.60 1985CKa (104136)1116

Medium: MeOH. In propylenecarbonate K1=9.0; in DMF K1=6.73; in DMSO K1=6.12

****

C26H36N2O6Cl2 H2L (7215)

7,16-Bis((5-chloro-2-hydroxybenzyl)-1,4,10,13-tetraoxa-7,16-diazacyclooctadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	non-aq	25°C	100%	C	H	K(K+H2L)=2.76	1995ZBa	(104156)1117

Medium: methanol. DH(K)=-24.1 kJ mol-1, DS(K)=-28 J K-1 mol-1.

****

C26H36O9 L CAS 518019-36-8 (8969)

2,3:11,12-Dibenzo-1,4,7,10,13,16,19,22,25-nonaoxacycloseptacosa-2,11-diene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	C		K1=2.43	2002YEb	(104163)1118

Method: steady state fluorescence spectroscopy. Medium: acetonitrile.

****

C26H36O9 L DiBz-27-crown-9 CAS 61260-08-0 (1775)

Dibenzo-27-crown-9.

2,3:17,18-Dibenzo-1,4,7,10,13,16,19,22,25-nonaoxacycloseptacosa-2,15-diene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	alc/w	25°C	70%	U	H	K1=2.86	1976ITa	(104172)1119

Medium: 70% w/w MeOH/H2O. DH(K1)=-39.7 kJ mol-1

****

C26H38N2O4 L CAS 80757-23-9 (2450)

N,N'-Bis(benzyl)-1,10-diaza-4,7,13,16-tetraoxacyclooctadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	U		K1=3.38	1992MGa	(104186)1120

Medium: MeOH, 0.1 M Bu4NPF6

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	alc/w	25°C	93%	U		K1=3.0	1978WVa	(104187)1121

Medium: 93% MeOH/H2O

****

C26H38N2O6 L CAS 155581-87-6 (8849)

7,16-Bis(2-methoxyphenyl)-1,4,10,13-tetraoxa-7,16-diazacyclooctadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	alc/w	RT	50%	C		K1=3.9	2002GLb	(104194)1122

Medium: 50% MeOH/H2O, pH 7.4 (0.1 M Tris buffer), 0.1 M Me4NCl.

****

C26H38O6P2 L CAS 470454-13-8 (8995)
7,16-Dibenzyl-1,4,10,13-tetraoxa-7,16-diphosphacyclooctadecane-7,16-dioxide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 24°C 100% C 2002MRd (104212)1123
K(K+A+L)=5.27
Medium: CDCl3. HA is picric acid.
****
C26H38O8 L CAS 20740-89-0 (5613)
1,20-Diphenoxy-3,6,9,12,15,18-hexaoxaeicosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 100% M K1=1.99 1976FAa (104216)1124
****
C26H38O8 L (2507)
2,5,8,11,16,19,22,25-Octaoxa-12,13:14,15-dibenzohexacosa-12,14-diene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=1.45 1975CJa (104219)1125
Medium: MeOH
****
C26H40N4O6 H2L CAS 227796-04-5 (8915)
7,16-Bis(5-amino-2-hydroxybenzyl)-1,4,10,13-tetraoxa-7,16-diazacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% C H 1999SBf (104226)1126
K(K+H2L)=2.81
Medium: MeOH. DH(K)=-34.8 kJ mol-1, DS(K)=-63.1 J K-1 mol-1.
****
C26H40O10 L CAS 123313-39-3 (5574)
23,23-Dimethyl-24,25-(1,4-Benzodioxinic)-21,4,7,10,13,16,19,22-octaoxacyclohexacosa
-24-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 100% U K1=2.63 B2=4.73 1989MGb (104240)1127
Medium: MeOH
****
C26H40O11P2 L (5727)
1,7-Bis(2-(diethoxyphosphinylmethoxy)phenyl)-1,4,7-trioxaheptane;2(EtO)2PO.CH2OC6H4
C2H4OC2H4)2O

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=4.4 1989EVa (104243)1128
Medium: tetrahydrofuran/CHCl3 4:1 (volume)

****
C26H45N3O6 L CAS 111928-04-2 (8968)
7-Phenyl-4,10,16,19,24,27-hexaoxa-1,7,13-triazabicyclo[11.8.8]nonacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis none 25°C dil C K1=7.79 1987BBf (104279)1129
K(K+A+L(org)=KAL(org))=5.19
Method: extraction of metal picrate from H2O into CHCl3.
****
C26H48N2O6 L (6003)
5,6,14,15-Dicyclohexyl-4,7,13,16,21,24-hexaoxa-1,10-diazabicyclo[8.8.8]hexacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U H K1=6.92 1987BUb (104295)1130
In MeOH. DH=-36.1 kJ mol-1
****
C26H48O6 L (2342)
19,21,26,28-Tetramethyl-2,5,8,11,14,17-hexaoxatricyclo[22.4.0.0(18,23)]octacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ nmr non-aq 24°C 100% U M 1981BEb (104309)1131
K(K(picrate)+L)=7.2
Medium: CDCl3
****
C26H50N2O7 L (6931)
N,N'-Bis(1-tetrahydrofuranyl-2-ethoxyethyl)-1,4-diaza-7,10,13-trioxacyclopentadecan
e;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 90% U H K1=3.59 1994IZa (104319)1132
L=N,N'-Bis(1-tetrahydrofuranyl-2-ethoxyethyl)-1,4-diaza-7,10,13-trioxacyclo-
pentadecane. Medium: 90% v/v MeOH/H2O. DH(K1)=-43.2 kJ mol-1.
****
C26H52N2O5 L Cryptand 221D CAS 62002-40-8 (8956)
5-Decyl-4,7,13,16,21-pentaoxa-1,10-diazabicyclo[8.8.5]tricosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% M M K1=6.91 1999DSd (104321)1133
K(KL+ClO4)=1.18
Medium: acetonitrile.
****
C26H52N4O5 L CAS 78648-22-3 (1534)
4,10,16,22,33-Pentaoxa-1,7,13,19-tetraazatricyclo[11,11,6,5(7.19)pentatriacontane;

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

---
K+ gl R4N.X 25°C 0.10M U K1=2.52 1982GKc (104328)1134
Medium: 0.10 M NMe4NO3.

K+ gl R4N.X 25°C 0.10M U K1=<2 1981GLa (104329)1135
****
C26H52N6O7S2 L CAS 503465-16-5 (9245)
4,12,20,26,29,34,37-Heptaoxa-1,7,9,15,17,23-hexaazabicyclo[21.8.8]nonatriacontane-8
,16-dithione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 95% C K1=5.33 2004KVa (104339)1136
Medium: 95% MeOH/H2O, 0.01 M Et4NClO4.
****
C26H52N6O7S2 L CAS 503465-12-1 (9243)
9,12,15,26,29,34,37-Heptaoxa-1,4,6,18,20,23-hexaazabicyclo[21.8.8]nonatricontane-5,
19-dithione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 95% C K1=3.76 2004KVa (104349)1137
Medium: 95% MeOH/H2O, 0.01 M Et4NClO4.
****
C26H53NO6 L CAS 75006-60-9 (1716)
N-(Dodecyl-di-(oxyethylene))-monoaza-15-crown-5

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U I K1=3.55 1983MKa (104354)1138
****
C26H53NO8 L CAS 86170-85-6 (1718)
N-(Octyl-tetra(oxyethylene))-monoaza-15-crown-5

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=4.74 1983MKa (104356)1139
****
C26H53NO8 L CAS 86170-87-8 (1712)
N-(Octyl-tri-(oxyethylene))-monoaza-18-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U K1=5.74 1983MKa (104358)1140
****
C26H54N2O10 L CAS 85726-99-4 (652)
4,13-Dimethyloxyethoxyethoxyethylidene-1,7,10,16-tetraoxy-4,13-diazaoctadecane;

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

K+ sol non-aq 20°C 100% C K1=5.65 1983SLa (104360)1141
Medium: CHCl3
****
C27H26O2P2 L (6811)
1,2-Bis(2-Diphenylphosphinyl)-1-methylethane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=2 1990EAb (104396)1142
Medium: THF+CHCl3 4:1(vol). Metal as 2,4-dinitrophenolate. Data also for
1,1-dimethyl, 1-hexyl, 1-heptyl, 1-octyl and 1-decyl analogues
****
C27H26O3P2 L (6812)
1,2-Bis(2-Diphenylphosphinyl)-1-hydroxymethylethane;
(C6H5)2PO.CH(CH2OH)CH2.PO(C6H5)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=1.9 1990EAb (104401)1143
Medium: THF+CHCl3 4:1(vol). Metal as 2,4-dinitrophenolate. Data also for
3-hydroxypropyl analogue
****
C27H26O3P2 L (7159)
1,4-Bis(diphenylphosphinyl)-2-oxobutane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ oth non-aq 25°C 100% U K1=2.9 1995TEa (104406)1144
Medium: tetrahydrofurane:CHCl3 4:1 (v/v).
Metal ion is used as 2,4-dinitrophenolate.
****
C27H32NO5S+ L CAS 423763-94-4 (8997)
3-Ethyl-2-[4-(2,3,5,6,8,9,11,12-octahydro-1,4,7,10,13-benzopentaoxacyclopentadecin-
15-yl)butadien

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=3.11 2002GVc (104516)1145
Medium: acetonitrile, 0.1 M Et4NClO4.
****
C27H47N3O6 L (8029)
Tripodal ionophore 3;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C 2001LFa (104624)1146
K(KP+L=LiPL)=4.37
Method: Analyses by spectrophotometry. Medium: chloroform. P is picrate.
****
C28H24N2O4 L (5742)

5,6-Benzo-1,10-di(8-quinolyl)-1,4,7,10-tetraoxadecane;
C9H6N.O.C2H4.O.C6H4.O.C2H4.O.C9H6

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=5.0	1989BEa	(104675)1147

Medium: tetrahydrofuran/CHCl3 4:1 (volume)

****

C28H24O6 L TetBz18-Crown-6 CAS 99700-20-6 (6070)
2,3:8,9:11,12:14,15-Tetrabenzo-1,4,7,10,13,16-hexaoxacyclooctadeca-2,8,11,14-tetrae
ne

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	dis	non-aq	23°C	100%	C		K1=4.0 K(K+A+L(org)=KAL(org))=3.94	1992HGb	(104681)1148

Extraction of metal chloride (A) from aqueous solution into nitrobenzene/
0.01M Bu4NB(Ph)4. Peak potential voltammetry and distribution of 42K.

****

C28H24O6 L CAS 72011-26-8 (8874)
2,3:8,9:11,12:17,18-Tetrabenzo-1,4,7,10,13,16-hexaoxacyclooctadeca-2,8,11,17-tetrae
ne;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	dis	non-aq	23°C	100%	C		K1=3.4 K(K+A+L(org)=KAL(org))=3.97	1992HGb	(104686)1149

Extraction of metal chloride (A) from aqueous solution into nitrobenzene/
0.01M Bu4NB(Ph)4. Peak potential voltammetry and distribution of 42K.

****

C28H28O3P2 L (6815)
1,5-Bis(diphenylphosphinyl)-3-oxapentane; O(CH2.CH2.PO(C6H5)2)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=5.0	1993EVa	(104710)1150

Medium: THF+CHCl3 (4:1 vol)

K+	con	non-aq	25°C	100%	U		K1=2.7	1992BEa	(104711)1151

Medium: THF+CHCl3 (4:1 vol)

****

C28H28O4P2 L (7891)
1,6-Bis(diphenylphosphinyl)-2,5-dioxohexane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C		C		K1=3.2	1999TEa	(104721)1152

In: tetrahydrofurane/CHCl3 4:1 v/v

****

C28H30N2O2P2 L CAS 68745-29-9 (5707)

N,N'-Bis(diphenylphosphinylmethyl)-1,2-diaminoethane; ((C6H5)2PO.CH2.NH.CH2-)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=2.8	1984YKa	(104726)1153

Medium: tetrahydrofuran + CHCl3 4:1, K as 2,4-dinitrophenolate

****

C28H32N2O6 L (5743)
1,16-Di(8-quinolyl)-1,4,7,10,13,16-hexaoxahexadecane; C9H6N.O.(C2H4O)5.C9H6N

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=5.9	1989BEa	(104749)1154

Medium: tetrahydrofuran/CHCl3 4:1 (volume)

****

C28H35O7P L CAS 90275-27-7 (2068)
Adamantylphosphonyldibenzo-17-crown-6

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sol	non-aq	25°C	100%	U		K1=3.69	1987TCa	(104767)1155

Medium: CH2Cl2, 2% MeCN. Metal as picrate

****

C28H36N2O7S2 HL CAS 150196-54-6 (7735)
3-(3-Sulfopropyl)-2-[4-[N-(1,4,7,10,13-pentaoxa-16-azacyclooctadeca)]]styryl-benzot
hiazolium;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	18°C	100%	C		K1=1.3	1997LHa	(104783)1156

Medium: acetonitrile.

****

C28H40N2O6 L (2443)
Bicyclo-NcN'-1,10-diaza-4,7,13,16-tetraoxaoctadecane;(c=(CH2.C6H4.O.CH2)2)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	alc/w	25°C	93%	U		K1=2.65	1978WVa	(104817)1157

Medium: 93% MeOH/H2O

****

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
K+	con	non-aq	25°C	100%	C	I M		1983RCb	(104841)1158
							K(KL+Cl)=0.60		
							K(KL+ClO4)=078		
							K(KL+A)=1.29		
							K(KL+B(C6H5)4)=1.38		

Medium: 100% methanol. HA=picric acid. Also data for 100% acetonitrile,
propylene carbonate, dimethylformamide, isopropyl alcohol and butanol.

K+ con alc/w 25°C 100% U I M 1979BDa (104842)1159
K(KCl+L)=5.06
Medium: MeOH. In DMSO: K(KClO4+L)=3.42. In MeCN: K(KBPh4+L)=4.98
****
C28H40O8 L AN(MOEOEOM)2AN (2243)
29,30-Dimethoxy-13,27-dimethyl-3,6,9,17,20,23-hexaoxatricyclo-triconta-1,11,13,15,25,27-hexaene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% U H 1979KLa (104856)1160
K(K(picrate)+L)=3.94
Medium: CHCl3
****
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
---
K+ dis oth/un 25°C 0 U K1=4.33 1994OUa (104884)1161

K+ con non-aq 25°C 100% U I K1=5.96 1991ASb (104885)1162
Medium: 1,2-dichlorethane. In nitromethane: K1=5.37; in MeCN: K=4.63;
in acetone: K=4.39; in DMF: K=3.13

K+ vlt non-aq 25°C 100% U K1=12.4 1990SPa (104886)1163
Medium: 1,2-dichloroethane

K+ nmr non-aq 21°C 100% U 1987SRb (104887)1164
B(K2L)=1.72
Medium: CH3NO2.

K+ sp mixed 25°C 20% U I K1=2.42 1986GSa (104888)1165
In 0.015 M Et4N.Cl, 20% CH3CN/H2O. In 40%, K1=2.71; 60%, K1=3.23;
80%, K1=3.88; 100% CH3CN, K1=4.90.

K+ nmr non-aq 20°C 100% U K1=4.30 1976LCa (104889)1166
Medium: acetone

K+ ISE alc/w 25°C 100% A K1=4.60 1971FRa (104890)1167
Medium: MeOH
****
C28H42N2O6 L (2451)
N,N'-Bis(4-methoxybenzyl)-1,10-diaza-4,7,13,16-tetraoxacyclooctadecane;

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

K+ gl alc/w 25°C 93% U K1=2.8 1978WVa (104927)1168
Medium: 93% MeOH/H2O
****
C28H42O9 L CAS 97583-32-9 (5614)
1,13-Diphenoxy-3,6,9,12,15,18,21-heptaoxatricosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 100% M K1=2.44 1976FAa (104930)1169
****
C28H43NO5 L CAS 36080-62-3 (5355)
2:3,11:12-Dibenzo-16-octyl-1,4,7,10,13-pentaoxa-16-azaoctadeca-2,11-diene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ EMF alc/w 25°C 100% A K1=4.10 1971FRa (104932)1170
Medium: MeOH
****
C28H44N4O6 H2L CAS 227796-02-3 (8913)
7,16-Bis(3-amino-2-hydroxy-5-methylbenzyl)-1,4,10,13-tetraoxa-7,16-diazacyclooctade
cane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% C H 1999SBf (104938)1171
K(K+H2L)=2.36
Medium: MeOH. DH(K)=-10.6 kJ mol-1, DS(K)=9.6 J K-1 mol-1.
For the 3-trifluoroacetamidobenzyl derivative, DH(K)=-70, DS(K)=-133.
****
C28H44O6 L (1704)
Decalino-(tert-butyl-benzo)-18-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C ? U K1=5.47 1983KTa (104940)1172
****
C28H44O11 L CAS 123295-33-0 (5575)
26,26-Dimethyl-27,28-(1,4-Benzodioxinic)-1,4,7,10,13,16,19,22,25-nonoxacyclononacos
a-27-ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 100% U K1=2.60 B2=4.90 1989MGb (104942)1173
Medium: MeOH
****
C28H44O12P2 L (5728)
1,10-Bis(2-(diethoxyphosphinylmethoxy)phenyl)-1,4,7,10-tetraoxadecane;

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

K+ con non-aq 25°C 100% U K1=5.1 1989EVa (104945)1174
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
****
C28H47NO11 L (1689)
N-(2-(2-(4'-Benzo-15-crown-5)-oxyethoxy)ethyl-1,4,7,10-tetraoxa-13-azacyclopentadec
ane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 10% U K1=3.16 1986HAa (104968)1175
Medium: 10% MeOH/H2O
****
C28H48O6 L CAS 88692-13-1 (1706)
Didecalino-18-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C ? U K1=6.18 1983KTa (104976)1176
****
C28H52O5 L (2339)
16,16,18,18,23,23,25,25-Octamethyl-2,5,8,11,14-pentaoxatricyclo(22.4.0.0(15,20))pen
tacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ nmr non-aq 24°C 100% U M 1981BEb (105009)1177
K(K(picrate)+L)=5.2
Medium: CDCl3
****
C28H52O6 L (5352)
Di(t-butylcyclohexyl)-18-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ oth oth/un 25°C dil U K1=2.08 1970MSa (105015)1178
****
C28H52O10 L CAS 17455-26-4 (6071)
2,3:17,18-Dicyclohexyl-1,4,7,10,13,16,19,22,25,28-decaoxacyclotriacontane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sol non-aq 25°C 100% C I K1=4.86 1999KCa (105021)1179
Medium: acetonitrile. Also K1=4.66 (propylene carbonate), K1=4.50 (MeOH),
K1=5.93 (i-PrOH), K1=5.47 (n-BuOH), K1=4.58 (acetone).
****
C28H54N2O8 L (6936)
N,N'-Bis(1-furanyl-2-ethoxyethyl)-1,4-diaza-7,10,13,16-tetraoxacyclooctadecane;

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

K+ cal alc/w 25°C 90% U IH K1=4.52 1994IZa (105026)1180
L=N,N'-Bis(1-furanyl-2-ethoxyethyl)-1,4-diaza-7,10,13,16-tetraoxacycloocta-
decane. Medium: 90% v/v MeOH/H2O. DH(K1)=-34.9 kJ mol-1. Also in 100% MeOH
****
C28H56N2O6 L Cryptand 222D CAS 69878-46-2 (8957)
5-Decyl-4,7,13,16,21,24-hexaoxa-1,10-diazabicyclo[8.8.8]hexacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% M M K1=>12 1999DSd (105029)1181
K(KL+ClO4)=0.87
Medium: acetonitrile.
****
C28H56N2O11 L BOA18C6 (6118)
3-Oxa-1,5-Bis-(1-aza-4,7,10,13,16-pentaoxacyclooctadecyl)pentane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 90% U K1=4.75 B2=7.82 1988HKa (105033)1182
Medium: 90% w/w MeOH/H2O
****
C28H56N6O8S2 L CAS 503465-18-7 (9246)
4,12,15,23,29,32,37,40-Octaoxa-1,7,9,18,20,26-hexaazabicyclo[24.8.8]dotetracontane-
8,19-dithione;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 95% C K1=5.62 2004KVa (105040)1183
Medium: 95% MeOH/H2O, 0.01 M Et4NClO4.
****
C28H56N6O8S2 L CAS 503465-14-3 (9244)
9,12,15,18,29,32,37,40-Octaoxa-1,4,6,21,23,26-hexaazabicyclo[24.8.8]dotetratriconta
ne-5,22-dithio

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 95% C K1=3.61 2004KVa (105050)1184
Medium: 95% MeOH/H2O, 0.01 M Et4NClO4.
****
C28H57NO7 L CAS 81239-49-8 (1708)
N-(Dodecyl-di(oxyethylene))-monoaza-18-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U I K1=5.62 1983MKa (105055)1185
****
C28H57NO7 L CAS 81239-49-8 (1715)
N-(Dodecyl-tri-(oxyethylene))-monoaza-15-crown-5

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

```
--------------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U  I     K1=4.46        1983MKa (105057)1186
********************************************************************************
C28H57NO9              L                      CAS 86181-95-5  (1711)
N-(Octyl-tetra-(oxyethylene))-monoaza-18-crown-6
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         ISE alc/w  25°C 100%  U        K1=5.75        1983MKa (105059)1187
********************************************************************************
C28H58N2O8             L                      CAS 85726-98-3  (651)
4,13-Dibutoxyethoxyethylidene-1,7,10,16-tetraoxo-4,13-diazacyclooctadecane;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         sol non-aq 20°C 100%  C        K1=6.03        1983SLa (105061)1188
Medium: CHCl3
********************************************************************************
C29H30O3P2             L                      CAS 176849-77-7  (7160)
1,6-Bis(diphenylphosphinyl)-2-oxohexane;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         oth non-aq 25°C 100%  U        K1=2.6         1995TEa (105079)1189
Medium: tetrahydrofurane:CHCl3 4:1 (v/v).
Metal ion is used as 2,4-dinitrophenolate.
********************************************************************************
C29H30O3P2             L                      CAS 176849-78-8  (7161)
1,6-Bis(diphenylphosphinyl)-3-oxohexane;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         oth non-aq 25°C 100%  U        K1=2.3         1995TEa (105084)1190
Medium: tetrahydrofurane:CHCl3 4:1 (v/v).
Metal ion is used as 2,4-dinitrophenolate.
********************************************************************************
C29H30O4P2             L                        (7897)
1,7-Bis(diphenylphosphinyl)-2,6-dioxoheptane;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         con non-aq 25°C       C        K1=3.5         1999TEa (105089)1191
In: tetrahydrofurane/CHCl3 4:1 v/v
********************************************************************************
C29H35NO5              L                      CAS 201154-06-5  (7825)
N-(1-Pyrenylmethyl)-1,4,7,10,13-pentaoxa-16-azacyclooctadecane;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         sp  mixed  25°C  90%  C                       1997KKa (105100)1192
```

K(KSCN+L)=4.75
Method: fluorescence emission. Medium: MeOH/CHCl3 (9:1 v/v).
****
C29H36NO6S+ L CAS 423763-96-6 (8998)
2-[4-(2,3,5,6,8,9,11,12,14,15-Decahydro-1,4,7,10,13,16-benzohexaoxacyclooctadecin-1
8-yl)butadien

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=4.81 2002GVc (105105)1193
Medium: acetonitrile, 0.1 M Et4NClO4.
****
C29H40N2O6Cl2 L CAS 181706-77-4 (8627)
3,18-Dichlorooctahydro-5H,16H-6,15-(ethanoxyethanoxyethano)-dibenzotetraoxaazacyclo
heneicosine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal non-aq 25°C 100% C H K1=4.58 1998ZBc (105137)1194
Medium: MeOH. DH(K1)=-31.1 kJ mol-1, DS(K1)=-16.6 J K-1 mol-1.
****
C29H42N2O6 L (2444)
Bicyclo-NcN'-1,10-diaza-4,7,13,16-tetraoxaoctadecane;(c=(CH2.C6H4.O.CH2)2.CH2)

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 93% U K1=2.8 1978WVa (105147)1195
Medium: 93% MeOH/H2O
****
C29H58N2O10 L BCA18C6 CAS 74776-87-7 (6117)
1,5-Bis-(1-aza-4,7,10,13,16-pentaoxacyclooctadecyl)pentane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 90% U K1=4.54 B2=7.62 1988HKa (105170)1196
Medium: 90% w/w MeOH/H2O
****
C30H30N20O10 L CAS 259886-49-2 (8959)
Cucurbit[5]uril;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sol none 25°C dil C K1=1.31 2001BCf (105216)1197
Method: dissolution of ligand in a 0.002-0.02 M KX solution; spectrophoto
metric measurement. For decamethylcucurbit[5]uril, K1=1.11.
****
C30H32O4P2 L (6816)
1,8-Bis(diphenylphosphinyl)-3,6-dioxaoctane;

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

---
K+ con non-aq 25°C 100% U K1=2.80 1993EBa (105227)1198
Medium: CH3CN. Data also for 3,5,8-trioxa, 3,5,8,11-tetraoxa and 3,5,8,11-pe
ntaoxa analogues

K+ con non-aq 25°C 100% U K1=3.2 1992BEa (105228)1199
Medium: THF+CHCl3 (4:1 vol)
****
C30H32O5P2 L (7892)
1,9-Bis(diphenylphosphinyl)-2,5,8-trioxononane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C C K1=3.8 1999TEa (105235)1200
In: tetrahydrofurane/CHCl3 4:1 v/v
****
C30H34N2O2P2 L CAS 68743-31-3 (2066)
Diaminoethane-N,N'-di-2-ethyldiphenylphosphine oxide; (CH2.NH.C2H4.P(O)(C6H5)2)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=2.56 1986STb (105240)1201
Medium: THF:CHCl3 4:1 v/v. M as 2,4-dinitrophenolate
****
C30H36N8O3 Furan-cryptand CAS 121954-37-8 (7451)
39,40,41-Trioxa-1,4,11,14,17,24,29,36-octaazapentacyclo[12.12.12.1.1.1]henLetetraco
ntadodecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% U K1=2.6 1996AAb (105254)1202
Medium: MeCN
tacyclo[12.12.12.1(6,9).1(19,22).1(31,34]hentetetraconta-4,6,8.....dodecaene
****
C30H36O6 L ANANAN(MOE)2O (2239)
2,3,4,5,6,7,8,9,10-Tri(1,3-(2-methoxy-5-methylbenzo))-12,15,18-trioxacyclooctadeca-
2,5,8-triene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% U H 1979KLa (105260)1203
K(K(picrate)+L)=9.06
Medium: CHCl3
****
C30H37N5O7 HL CAS 552856-74-3 (8846)
7-[2-Methoxy-4-[(4-nitrophenyl)azo]phenyl]-13-(2-methoxyphenyl)-1,4,10-trioxa-7,13-
diazacyclopen;

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

K+ sp alc/w RT 50% C K1=1.6 2002GLb (105266)1204
Medium: 50% MeOH/H2O, pH 7.4 (0.1 M Tris buffer), 0.1 M Me4NCl.
****
C30H38N2O4 L (5828)
Trimethoxyphenylcryptand 3,1.
25,26,27-Trimethoxy-5,10,15-trimethyl-22-oxa-1,19-diazatetra-
---
Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ nmr non-aq 25°C 100% U K1=<8.68 1986CHc (105272)1205
In CDCl3
****
C30H38N2O8 L CAS 137571-97-2 (6821)
Anthraquinone[2.2]cryptand;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE non-aq 25°C 100% U K1=6.22 1992CSc (105277)1206
Ag/Ag+ electrode. Medium: MeCN, 0.05 M Bu4NClO4
****
C30H42O10P4 L CAS 97910-31-1 (2083)
Tris-((2-(dimethylphosphinylmethoxy)phenoxy)methyl)phosphine oxide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=3.72 1989KSa (105301)1207
Medium: tetrahydrofuran/CHCl3 4:1 (vol)
****
C30H44N2O6 L (2445)
Bicyclo-NcN'-1,10-diaza-4,7,13,16-tetraoxaoctadecane;(c=(CH2.C6H4.O.(C2H4)2)

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 93% U K1=2.85 1978WVa (105310)1208
Medium: 93% MeOH/H2O
****
C30H44O10 L CAS 96011-79-9 (653)
4,4'(5')-Dimethylbenzo-30-crown-10;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sol non-aq 20°C 100% C K1=6.89 1983SLa (105318)1209
Medium: CHCl3
****
C30H46O10 L (5615)
1,26-Diphenoxy-3,6,9,12,15,18,21,24-octaoxahexacosane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 100% M K1=2.71 1976FAa (105324)1210

****
C30H48N4O6 L (6937)
N,N'-Bis(1-pyridyl-2-ethoxyethyl)-1,4-diaza-7,10,13,16-tetraoxacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 90% U H K1=4.26 1994IZa (105326)1211
L=N,N'-Bis(1-pyridyl-2-ethoxyethyl)-1,4-diaza-7,10,13,16-tetraoxacycloocta-
decane. Medium: 90% v/v MeOH/H2O. DH(K1)=-38.1 kJ mol-1.
****
C30H48O12 L CAS 123313-40-6 (5576)
29,29-Dimethyl-30,31-(1,4-Benzodioxinic)-1,4,7,10,13,16,19,22,25,28-decaoxacyclodot
riaconta30ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 100% U K1=2.54 B2=4.74 1989MGb (105340)1212
Medium: MeOH. Some other similar ligands also studied
****
C30H48O13P2 L CAS 112120-14-6 (5729)
1,13-Bis(2-(diethoxyphosphinylmethoxy)phenyl)-1,4,7,10,13-pentaoxatridecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=5.4 1989EVa (105343)1213
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
****
C30H57NO8 HL 18NH15-C5A CAS 79145-86-1 (5405)
2-Carboxy-3-N-octadecanylformamide-1,4,7,10,13-pentaoxycyclopentadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 90% U K1=2.9 1984FWa (105382)1214
B(KHL)=8.3
Medium: 90% v/v MeOH/H2O, 0.05 M R4NX
****
C30H61NO8 L CAS 86181-96-6 (1710)
N-(Dodecyl-tri(Oxyethylene))-monoaza-18-crown-6

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 100% U I K1=5.70 1983MKa (105384)1215
****
C31H34O4P2 L (7157)
1,9-Bis(diphenylphosphinyl)-3,7-dioxononane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ oth non-aq 25°C 100% U K1=2.5 1995TEa (105525)1216
Medium: THF:CHCl3 4:1 v/v. K as 2,4-dinitrophenolate. Also other si

milar ligands
****
C31H46N2O6 L (2446)
Bicyclo-NcN'-1,10-Diaza-4,7,13,16-tetraoxaoctadecane;(c=(CH2.C6H4.O.C2H4)2.CH2)

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 93% U K1=2.65 1978WVa (105552)1217
Medium: 93% MeOH/H2O
****
C32H28O4P2 L CAS 88928-04-5 (2072)
1,2-Dihydroxybenzene bis(diphenylphosphinylmethyl) ether

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C C K1=3.1 1999TEa (105575)1218
In: tetrahydrofurane/CHCl3 4:1 v/v
****
C32H29O3P3 L CAS 21851-89-8 (2640)
P,P,P',P",P"-Pentaphenyldimethylenetri(phosphineoxide); (Ph2P(O)CH2)2P(O)Ph
---
Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% U M 1981SPb (105582)1219
K(KI+L)=1.77
Medium: CH3CN
****
C32H33N3O12F2 L CAS 149696-88-8 (7035)
2,3:14,15-Difluorobenzo-8,9-(4-dicarboxymethyliminobenza)-4,13-diaza-4,13-dicarboxy
methylcyclooc-

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp R4N.X 30°C 0.10M U 1993SKf (105617)1220
K1eff=1.99
Medium: Me4NCl. K1eff at pH 7.2
****
C32H36O5P2 L CAS 137728-07-5 (6837)
1,11-Bis(diphenylphosphinyl)-3,6,9-trioxaundecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=3.9 1992BEa (105645)1221
Medium: THF+CHCl3 (4:1 vol)
****
C32H36O6P2 L (7893)
1,12-Bis(diphenylphosphinyl)-2,5,8,11-tetraoxododecane;

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

K+ con non-aq 25°C C K1=4.4 1999TEa (105650)1222
In: tetrahydrofurane/CHCl3 4:1 v/v
****
C32H38N2O7 L CAS 488759-47-3 (9009)
cis-2,12-Dimethyl-2,12-bis[(8-quinolyloxy)methyl]-15-crown-5;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=4.84 2002NMa (105668)1223
Medium: THF, using metal picrate salt. For the trans- ligand, K1=4.28.
****
C32H38N2O7 L CAS 225792-57-4 (9008)
cis-2,6-Dimethyl-2,6-bis[(8-quinolyloxy)methyl]-15-crown-5;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=4.88 2002NMa (105670)1224
Medium: THF, using metal picrate salt. For the trans- ligand, K1=4.26.
****
C32H38N2O7 L (9015)
cis-2,9-Dimethyl-2,6-bis[(8-quinolyloxy)methyl]-15-crown-5;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=5.98 2002NMa (105672)1225
Medium: THF, using metal picrate salt. For the trans- ligand, K1=4.22.
****
C32H38N2O10 L (7073)
7,16-Bis(6-methoxy-2-oxo-2H-1-benzopyran-7-yl)-1,4,10,13-tetraoxa-7,16-diazacyclooc
tadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp none RT 0 U K1=1.68 1994CGa (105674)1226
Method: fluorimetry
****
C32H38N4O6Cl2 HL CAS 172033-56-6 (8675)
2,2'-[1,4,10,13-Tetraoxa-7,16-diazacyclooctadecane-7,16-diylbis(methylene)]bis[5-Cl
-8-quinolinol]

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal non-aq 25°C 100% C H 1995ZBa (105679)1227
K(K+HL)=6.61
Medium: methanol. DH(K)=-58.1 kJ mol-1, DS(K)=-68.5 J K-1 mol-1.
****
C32H38N4O6Cl2 H2L (7214)
7,16-Bis((5-chloro-8-hydroxy-7-quinolinyl)methyl)-1,4,10,13-tetraoxa-7,16-diazacycl
ooctadecane;

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         cal alc/w  25°C 100%  U   H                    1996BBf (105690)1228
                                          K(K+H2L)=3.39
Medium: MeOH; 0.1 M Me4NCl. DH(K)=-24.4 kJ mol-1. Data also for similar
lariat ligands with substituted oxine side chains
*************************************************************************
C32H40N4O4              L                      CAS 340963-90-8  (8926)
8,8'-[1,4,10,13-Tetraoxa-7,16-diazacyclooctadecane-7,16-diylbis(methylene)bisquinol
ine;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         cal alc/w  25°C 100%  C   H    K1=4.58         2001DXa (105714)1229
Medium: MeOH. DH(K1)=-39.1 kJ mol-1, DS(K1)=-43.6 J K-1 mol-1.
*************************************************************************
C32H40N4O6            H2L                      CAS 254900-38-4  (8920)
7,16-Bis(8-hydroxyquinoline-2-ylmethyl)-1,4,10,13-tetraoxa-7,16-diazacyclooctadecan
e;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         cal alc/w  25°C 100%  C   H                    1999SBg (105719)1230
                                          K(K+H2L)=5.88
Medium: MeOH. DH(K)=-55.6 kJ mol-1, DS(K)=-73.8 J K-1 mol-1.
K and DH(K) determined by competitive calorimetric titration.
*************************************************************************
C32H40N6O6Cl2         H2L                      CAS 254900-39-5  (8921)
7,16-Bis(3-(5-chloro-2-hydroxyphenyl)pyrazol-1-ylmethyl)-1,4,10,13-tetraoxa-7,16-di
azacyclooctad;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         cal alc/w  25°C 100%  C   H                    1999SBg (105729)1231
                                          K(K+H2L)=3.82
Medium: MeOH. DH(K)=-47.8 kJ mol-1, DS(K)=-87.3 J K-1 mol-1.
*************************************************************************
C32H41N5O8             HL                      CAS 552856-75-4  (8847)
7-[2-Methoxy-4-[(4-nitrophenyl)azo]phenyl]-16-(2-methoxyphenyl)-1,4,10,13-tetraoxa-
7,16-diazacyc;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  alc/w   RT   50%  C        K1=2.1          2002GLb (105734)1232
Medium: 50% MeOH/H2O, pH 7.4 (0.1 M Tris buffer), 0.1 M Me4NCl.
*************************************************************************
C32H43N2O7S            HL                      CAS 189057-31-6  (7756)
3-(4-Carboxybutyl)-2-[4-[N-(1,4,7,10,13-pentaoxa-16-azacyclooctadeca)]]styryl-benzo
thiazolium;
-------------------------------------------------------------------------
```

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  non-aq 18°C 100%  C        K1=2.0         1997LHa (105756)1233
Medium: acetonitrile.
*************************************************************************
C32H44O12P2             L                     CAS 112120-16-8  (5738)
3,4:9,10:15,16-Tribenzo-1,18-di(diethoxyphosphinyl)-2,5,8,11,14,17-hexaoxaoctadeca-
3.9.15-triene;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=4.9         1989BEa (105776)1234
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
*************************************************************************
C32H46N2O8Cl2           L                     CAS 181706-75-2  (8626)
3,18-Dichlorododecahydro-5H,16H-6,15-(ethanoxyethanoxyethano)dibenzohexaoxadiazacyc
lohexacosine;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         cal non-aq 25°C 100%  C   H    K1=4.66        1998ZBc (105787)1235
Medium: MeOH. DH(K1)=-43.1 kJ mol-1, DS(K1)=-55.4 J K-1 mol-1.
*************************************************************************
C32H46O10               L                     CAS 77846-54-9  (5820)
Biphenyl bis-19-crown-5,
Octadecahydro-benzopentaoxacylononadecinobenzopentaoxacyclononadecane;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         gl  non-aq 25°C 100%  U        K1=1.34   B2=1.22   1985RCa (105791)1236
Medium: (CH3)2CO. L=Octadecahydro-4H,18H-[2,5,8,11,14]benzopentaoxacyclonona
decino[18,17,16-pqr][2,5,8,11,14]benzopentaoxacyclononadecane
*************************************************************************
C32H48N2O6              L                       (2447)
Bicyclo-NcN'-1,10-diaza-4,7,13,16-tetraoxaoctadecane;(c=(CH2.C6H4.O.C3H6)2)
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         gl  alc/w  25°C  93%  U        K1=2.9         1978WVa (105802)1237
Medium: 93% MeOH/H2O
*************************************************************************
C32H48N2O10             L                     CAS 84992-99-4  (665)
Diaminoethane-N,N'-dimethenyl-di-(benzo-15-crown-5);
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         cal mixed  25°C 0.15M C        K1=3.14        1986LWa (105805)1238
*************************************************************************
C32H52O14P2             L                     CAS 112120-15-7  (5730)
1,13-Bis(2-(diethoxyphosphinylmethoxy)phenyl)-1,4,7,10,13,16-hexaoxahexadecane;
```

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=5.1 1989EVa (105823)1239
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
****
C32H55NO13 L CAS 105495-11-2 (1690)
N-(2-(2-(4'-Benzo-18-crown-6)-oxyethoxy)ethyl-1,4,7,10,13-pentaoxa-16-azacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 10% U K1=4.66 B2=7.51 1986HAa (105832)1240
Medium: 10% MeOH/H2O
****
C32H58N2O12 H2L CAS 88454-81-3 (5409)
2,11-Bis(carboxy)-3,12-bis(octanylformamide)-18-crown-6 (anti);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 90% U K1=6.4 1984FWa (105837)1241
B(KHL)=11.8
Medium: 90% v/v MeOH/H2O, 0.05 M R4NX
****
C32H58N2O12 H2L CAS 88454-82-4 (5408)
3,11-Bis-carboxy-2,12-bis(octanylformamide)-18-crown-6 (syn);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 90% U K1=5.4 1984FWa (105843)1242
B(KHL)=11.0
Medium: 90% v/v MeOH/H2O, 0.05 M R4NX
****
C32H64N4O10 L CAS 42133-16-4 (8579)
4,10,13,19,25,28,33,36,41,44-Decaoxa-1,7,16,22-tetraazatricyclo[20.8.8.87,16]hexatetracontane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 95% C K1=4.8 1977LSc (105850)1243
K(KL+K)=3.9
Medium: 95% (w/w) MeOH/H2O, 0.1 M Et4NBr.
****
C32H66N2O4 L 22DD Kryptofix CAS 79495-97-9 (6655)
1,10-Didecyl-1,10-diaza-4,7,13,16-tetraoxacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% C T H K1=5.53 1997TAa (105862)1244
Medium: acetonitrile. DH(K1)=-43.6 kJ mol-1, DS(K1)=-39.5 J K-1 mol-1.

Data for 10-25 C.

K+ cal alc/w 25°C 100% U H 1986BUd (105863)1245
In MeOH. DH=-31.5 kJ mol-1

****

C33H41N3O6 L (8027)
Tripodal ionophore ;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	C			2001LFa	(105923)1246

K(KP+L=LiPL)=3.42
Method: Analyses by spectrophotometry. Medium: chloroform. P is picrate.

****

C33H41N3O6Cl2 L CAS 181706-78-5 (8628)
3,18-Dichlorohexahydro(ethanoxyethanoxyethano)-23,27-nitrilodibenzotetraoxadiazacyclopentacosine;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	non-aq	25°C	100%	C	H	K1=4.41	1998ZBc	(105927)1247

Medium: MeOH. DH(K1)=-23.0 kJ mol-1, DS(K1)=7.28 J K-1 mol-1.

****

C33H46N2O12 L (7049)
1,4-Diaza-1,4-di(5'-benzo-15-crown-5)-hepta-2,6-dione; CH2(CH2CONH.C14H19O5)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	U		K1=9.20	1979KMb	(105981)1248

Medium: CHCl3

****

C33H57N3O9 L Enniatin B CAS 917-13-5 (4177)
Enniatin B

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	alc/w	20°C	100%	U		K1=2.93	1968WPa	(105997)1249

Medium: MeOH, 1 M KI

****

C34H38N2O14 H2L (7072)
7,16-Bis(3-carboxy-6-methoxy-2-oxo-2H-1-benzopyran-7-yl)-1,4,10,13-tetraoxa-diazacyclooctadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	none	RT	0	U		K1=1.66	1994CGa	(106028)1250

Method: fluorimetry

****

C34H38O12P2 L (6906)
1,2:10,11:15,16:24,25-Tetrabenzo-13,27-di(methylphospha)-3,6,9,12,14,17,20,23,27,28

-10-crown-28

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	oth	non-aq	22°C	100%	U		K1=1.0	1978YSa	(106039)1251

Medium: 1:1 v/v EtOH+CHCl3. K as acetate salt

****

C34H40O6P2 L CAS 137728-08-6 (6838)
1,14-Bis(diphenylphosphinyl)-3,5,8,11-tetraoxatetradecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=5.0	1992BEa	(106043)1252

Medium: THF+CHCl3 (4:1 vol)

****

C34H40O7 L CAS 488759-49-5 (9011)
cis-2,9-Dimethyl-2,9-bis[(1-napthyloxy)methyl]-15-crown-5;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	C		K1=3.87	2002NMa	(106047)1253

Medium: THF, using metal picrate salt.

****

C34H40O7P2 L (7894)
1,15-Bis(diphenylphosphinyl)-2,5,8,11,14-pentaoxopentadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C		C		K1=5.0	1999TEa	(106050)1254

In: tetrahydrofurane/CHCl3 4:1 v/v

****

C34H42N2O6Cl2 L CAS 181706-79-6 (8629)
3,18-Dichlorooctahydro-5H,16H-6,15-(ethanoxyethanoxyethano)tribenzotetraoxadiazacyc
lodocosine;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	non-aq	25°C	100%	C	H	K1=5.10	1998ZBc	(106058)1255

Medium: MeOH. DH(K1)=-17.0 kJ mol-1, DS(K1)=40.6 J K-1 mol-1.

****

C34H44N2O5 L CAS 101671-92-5 (5825)
Trimethoxyphenylcryptand 3,1,1.
30,31,32-Trimethoxy-5,10,15-trimethyl-22,27-dioxo-1,9-diaza....

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	nmr	non-aq	25°C	100%	U		K1=11.00	1986CHc	(106068)1256

Medium: CDCl3

****

C34H46O10 L CAS 210485-26-0 (3146)

15,31-Diethylhexadecahydroanthra[2,3-b:6,7-b']bis[1,4,7,10,13]pentaoxacyclopentadec
in;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp mixed 20°C 80% C K1=5.65 1999OBa (106079)1257
K(KL+K)=2.27
Medium: 80% v/v CHCl3/MeOH.
****
C34H53O8Br H2L CAS 38784-08-6 (2336)
5-Bromolasalocid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl alc/w 25°C 100% M H 1988PJa (106098)1258
K(K+HL)=3.49
Also used K+ sensitive glass electrode. DH = -8.8 kJ mol-1; DS = 37
****
C34H54O8 H2L Lasalocid CAS 25999-20-6 (2335)
Lasalocid acid;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ nmr non-aq 20°C 100% C 1998MLa (106138)1259
K(K+HL)=1.8
Medium: CD3OD. Method: 13C nmr.

K+ dis oth/un 25°C 0.0 U K1=2.1 1992LPb (106139)1260

K+ gl alc/w 25°C 100% M H 1988PJa (106140)1261
K(K+HL)=3.56
K(K+H2L)=1.3
Medium: MeOH. Also using K+ sensitive glass elect. DH=-9.4 kJ mol-1; DS=37

K+ gl alc/w 25°C 100% U 1982BDc (106141)1262
K(K+2HL)=3.45
Medium: MeOH
****
C34H58N4O14 H2L CAS 83458-45-1 (5569)
2,11-Dicarboxy-3,12-dipiperidinenitroxide-18-crown-6 derivative;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ nmr alc/w 25°C 90% U K1=5.4 1987DDa (106171)1263
K(K+HL)=4.4
Medium: 90% MeOH/H2O. Syn-isomer

K+ nmr alc/w 25°C 90% U K1=6.8 B2=11.90 1987DDa (106172)1264
Medium: 90% MeOH/H2O. Anti-isomer
****

C34H60N4O12 H2L CAS 111216-14-9 (5570)
syn-2,11-Dicarboxy-3,12-dipiperidine-18-crown-6 derviative;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	nmr	alc/w	25°C	90%	U		K1=5.4 K(K+HL)=4.3 K(K+H2L)=4.2	1987DDa	(106174)1265

Medium: 90% MeOH/H2O

****

C34H64O10 H2L D218-6A2 CAS 88454-79-9 (5406)
11,12-Bis(dodecanyl)-1,2-bis(carboxy)-1,4,7,10,13,16-hexaoxacyclooctadecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	alc/w	25°C	90%	U		K1=6.3 B(KHL)=12.1	1984FWa	(106178)1266

Medium: 90% v/v MeOH/H2O, 0.05 M R4NX

****

C34H68N4O8 L CAS 49811-34-9 (8578)
10,13,25,28,33,36,41,44-Octaoxa-1,7,16,22-tetraazatricyclo[20.8.8.87,16]hexatetracontane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	95%	C		K1=4.0 K(KL+K)=3.2	1977LSc	(106181)1267

Medium: 95% (w/w) MeOH/H2O, 0.1 M Et4NBr.

****

C35H45N9 L CAS 312304-65-7 (7962)
29,32,35-TriMe-1,14,29,32,35,38,39,40,41-Nonaazahexacyclohentetraconta-3,5,7,8,10,12,16,18,20,21,

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	R4N.X	25°C	0.10M	U		K1=3.6 K(KL+H)=9.8 K(KHL+H)=9.3	2001BBa	(106202)1268

Medium: 0.10 M NMe4NO3.

****

C36H30O3Si3 L CAS 512-63-0 (1285)
Hexaphenyl-cyclotrisiloxane; ((C6H5)2SiO)3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	alc/w	25°C	100%	U		K1=<-0.3	1980OPa	(106216)1269

Medium: MeOH, 0.1 M Me4NBr

****

C36H32N2O6 L (5744)
5,6:11,12-Dibenzo-1,16-di(8-quinolyl)-1,4,7,10,13,16-hexaoxahexadecane;

```
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=5.8         1989BEa (106219)1270
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
********************************************************************************
C36H36N24O12            L    Cucurbituril     CAS 283175-97-3  (6744)
Cucurbit[6]uril;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         sol none   25°C  dil  C        K1=2.85        2001BCf (106259)1271
Method: dissolution of ligand in a 0.002-0.02 M KX solution;
spectrophotometric measurement.
--------------------------------------------------------------------------------
K+         cal mixed  25°C  50%  C   H    K1=2.79        1998BJb (106260)1272
Medium: 50% (v/v) HCOOH/H2O. DH(K1)=-2.3 kJ mol-1.
--------------------------------------------------------------------------------
K+         sp  none   25°C    0  U        K1=2.75   B2=4.05   1994HKa (106261)1273
--------------------------------------------------------------------------------
K+         sol none   25°C  0.0  U        K1=7.91        1992BCa (106262)1274
********************************************************************************
C36H36O4P2              L                       (2073)
3-t-Butyl-1,2-dihydroxybenzene bis(diphenylphosphinylmethyl) ether
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=2.95        1989KSa (106280)1275
Medium: tetrahydrofuran/CHCl3 4:1 (vol)
********************************************************************************
C36H36O6P2              L                    CAS 103990-64-3  (2077)
1,2-Bis(2-(diphenylphosphinylmethoxy)ethoxy)benzol;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=4.02        1989KSa (106284)1276
Medium: tetrahydrofuran/CHCl3 4:1 (vol)
********************************************************************************
C36H40O4S2              L    ANAN(MSM)2ANAN   CAS 1129-04-9  (2240)
Tetra(1,3-(2-methoxy-5-methylbenzo))-9,18-dithiacyclooctadeca-2,5,12,14-tetraene;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         dis non-aq 25°C 100%  U   H                    1979KLa (106294)1277
                                        K(K(picrate)+L)=3.28
Medium: CHCl3
********************************************************************************
C36H40O6                L    ANANAN(MOM)2AN   CAS 1129-07-2  (2238)
Tetra(1,3-(2-methoxy-5-methylbenzo))-12,18-dioxacyclooctadeca-2,5,8,14-tetraene;
--------------------------------------------------------------------------------
```

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         dis non-aq 25°C 100%  U   H                    1979KLa (106300)1278
                                       K(K(picrate)+L)=4.82
Medium: CHCl3
*************************************************************************
C36H40O6                L    ANAN(MOM)2ANAN   CAS 1129-06-1  (2241)
Tetra(1,3-(2-methoxy-5-methylbenzo))-9,18-dioxacyclooctadeca-2,5,10,14-tetraene;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         dis non-aq 25°C 100%  U   H                    1979KLa (106306)1279
                                       K(K(picrate)+L)=3.38
Medium: CHCl3
*************************************************************************
C36H44O7P2              L                       (5725)
1,17-Di(diphenylphosphinyl))-3,6,9,12,15-pentaoxaseptadecane;
Ph2PO.C2H4(O.C2H4)4OC2H4POPh2
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=4.9         1992BEa (106334)1280
Medium: THF+CHCl3 (4:1 vol)
-------------------------------------------------------------------------
K+         cal non-aq 25°C 100%  U        K1=2.75   B2=3.50   1991SGa (106335)1281
Medium: CH3CN; K as KNCS
*************************************************************************
C36H44O8P2              L                       (7895)
1,18-Bis(diphenylphosphinyl)-hexaoxooctadecane;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         con non-aq 25°C       C        K1=5.4         1999TEa (106344)1282
In: tetrahydrofurane/CHCl3 4:1 v/v
*************************************************************************
C36H47N3O6              L                       (8028)
Tripodal ionophore 2;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  non-aq 25°C 100%  C                       2001LFa (106374)1283
                                       K(KP+L=LiPL)=3.20
Method: Analyses by spectrophotometry. Medium: chloroform. P is picrate.
*************************************************************************
C36H48N2O6              L                     CAS 101695-36-7  (5826)
Trimethoxyphenylcryptand 3,2,1.
33,34,35-Trimethoxy-5,10,15-trimethyl-22,25,30-trioxa-1,19-diaza-
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
```

K+ nmr non-aq 25°C 100% U K1=>14.57 1986CHc (106378)1284
In CDCl3
****
C36H52N2O10 L CAS 84993-03-3 (666)
Hexadiamine-N,N'-dimethenyl-di-(benzo-15-crown-5);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal mixed 25°C 0.15M C K1=3.56 1986LWa (106393)1285
****
C36H52O14P2 L (5739)
3,4:12,13:21,22-Tribenzo-1,24-di(diethoxyphosphinyl)-2,5,8,11,14,17,20,23-octaoxate
tracosatriene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=5.0 1989BEa (106396)1286
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
****
C36H54O10 L CAS 86116-04-3 (5647)
1,8-Bis(4'-(2,3-benzo-1,4,7,10,13-pentaoxacyclopentadecane))-octane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 90% U K1=4.17 B2=5.70 1987KHa (106418)1287
90% w/w MeOH/H2O. Also data for the 1,4,7,10-tetraoxadecane-bridged
ligand: K1=4.64; K2=2.01.
****
C36H56O6 L CAS 54535-81-8 (1263)
2,3:11,12-Bis(3',5'-di-tert-butylbenzo)-1,4,7,10,13,16-hexaoxacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con alc/w 25°C 100% U I M 1979BDa (106436)1288
K(KCl+L)=3.20
Medium: MeOH. In DMSO: K(KClO4+L)=3.32. In MeCN: K(KBPh4+L)=4.04
****
C36H62O11 HL Monensin CAS 17090-79-8 (737)
Monensin, 1,6-dioxaspiro[4,5]decane derivative;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% C H K1=2.97 1997PBb (106501)1289
Medium: acetonitrile. Additional method: potentiometry with ISE.
By calorimetry, DH(K1)=-22 kJ mol-1, DS(K1)=-11 J K-1 mol-1.

K+ vlt non-aq 25°C 100% C I K1=9.7 1997WRa (106502)1290
Method: cyclic voltammetry. Medium: acetonitrile, 0.05 M Et4NClO4. In DMSO
K1=5.1; in acetone, K1=8.7; in hexamethylphosphoric triamide, K1=1.9.

K+ vlt non-aq 23°C 100% U I K1=9.7 1994FRa (106503)1291
Medium: MeCN. In PrCN: K1=9.2; acetone: 8.7; DMF: 7.3; Me-pyrrol.: 6.0;
NN-DMA: 5.6; DMSO: 5.1; Di-Et-formamide: 4.6; Di-Et-acetamide: 4.5; PC: 9.1

K+ ISE alc/w 25°C 100% M K1=4.97 1984CTa (106504)1292
Medium: MeOH

K+ ISE non-aq 25°C 100% M K1=7.35 1984CTa (106505)1293
Medium: N,N-dimethylformamide. In DMSO K1=5.05

K+ ISE alc/w 25°C 100% U K1=7.28 1984CTb (106506)1294
Medium: EtOH

K+ gl alc/w 25°C 100% U K1=5.18 1978HPa (106507)1295

K+ oth alc/w 25°C 100% U H K1=4.48 1971FCa (106508)1296
Method: micro-calorimetry. Medium: MeOH. DH=-16.2 kJ mol-1, DS=31 J K-1 m-1

K+ oth alc/w 25°C 100% U H K1=4.60 1971LFa (106509)1297
Method: micro-calorimetry. Medium:MeOH. DH=-15.6 kJ mol-1, DS=35 J K-1 mol-1

K+ ISE alc/w ? 100% U K1=4.98 1970LWb (106510)1298
Medium: MeOH. In methylcellosolve/H2O, 80:20, K1=3.82
****
C37H54N2O14 L (7050)
1,4-Diaza-1,4-di(5'-benzo-18-crown-6)-hepta-2,6-dione; CH2(CH2CONH.C16H23O6)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% U K1=8.03 1979KMb (106632)1299
Medium: CHCl3
****
C38H32O3P2 L (6804)
1,3-Bis(2-Diphenylphosphinylphenyl)-2-oxapropane; O(CH2.C6H4(PO.(C6H5)2)

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=3.2 1993BEb (106642)1300
Medium: THF+CHCl3 4:1(vol)
****
C38H32O4P2 L (1320)
1,4-Di(2-diphenylphosphinylphenyl)-1,4-dioxabutane;
Ph2PO.C6H4.O.CH2.CH2.O.C6H4.P(O)Ph2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=3.7 1991EBa (106648)1301
Medium: THF+CHCl3 4:1(vol)
****
C38H40O6P2 L (6833)

1,2-Bis(2-(2-(diphenylphosphinyl)ethoxy)ethoxy)benzene;
C6H4(OCH2CH2OCH2CH2PO(C6H5)2)2

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=4.6	1993EVa	(106659)1302

Medium: THF+CHCl3 (4:1 vol). Also data for other solvents

****

C38H48O8P2 L CAS 145864-37-5 (6839)
1,20-Bis(diphenylphosphinyl)-3,5,8,11,14,17-hexaoxaeicosane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=5.3	1992BEa	(106680)1303

Medium: THF+CHCl3 (4:1 vol)

****

C38H48O9P2 L (7896)
1,21-Bis(diphenylphosphinyl)-2,5,8,11,14,17,20-heptaoxoheneeicozane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C		C		K1=5.1	1999TEa	(106685)1304

In: tetrahydrofurane/CHCl3 4:1 v/v

****

C38H52N2O7 L CAS 101671-93-6 (5827)
Trimethoxyphenylcryptand 3,2,2.
36,37,38-Trimethoxy-5,10,15-trimethyl-22,25,30,33-tetraoxa-1,19-

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	nmr	non-aq	25°C	100%	U		K1=13.93	1986CHc	(106690)1305

In CDCl3

****

C38H54O10 L CAS 210485-29-3 (3260)
Hexadecahydro-15,31-bis(2-methylpropyl)anthra[2,3:6,7]bis[1,4,7,10,13]pentaoxacyclo
pentadecin;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	mixed	20°C	80%	C		K1=4.87 K(KL+K)=2.27	1999OBa	(106699)1306

Medium: 80% v/v CHCl3/MeOH.

****

C39H50N2O16 L CAS 332843-42-2 (8210)
19,19'-(1,3-Propandiyl)bis(1,4,7,10,13,16-hexaoxacyclooctadecino[2,3]isoindole-18,2
0-dione;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	C		K1=3.9	2001OYa	(106721)1307

Medium: methanol. For the 1,4-butanediyl- derivative, K1=4.1
****
C40H36O4P2 L (6805)
1,6-Bis(2-Diphenylphosphinylphenyl)-2,5-dioxahexane; (CH2.O.CH2.C6H4(PO(6H5)2)2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=3.2 1993BEb (106733)1308
Medium: THF+CHCl3 4:1(vol)
****
C40H36O5P2 L CAS 86341-96-0 (5724)
1,7-Di(2-diphenylphosphinyl)phenyl-1,4,7-trioxaheptane;Ph2PO.C6H4.O.C2H4.O.C2H4.O.C6H4.POPh2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=3.9 1991EBa (106745)1309
Medium: THF+CHCl3 4:1(vol). Data also for 1,4,7,10-tetraoxa,1,4,7,10,13-pentaoxa and 1,4,7,10,13,16-hexaoxa and 4-tributyl analogues
****
C40H44O4P2 L (2074)
3,5-Di(t-butyl)-1,2-dihydroxybenzene bis(diphenylphosphinylmethyl)ether
---
Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=2.66 1989KSa (106764)1310
Medium: tetrahydrofuran/CHCl3 4:1 (vol)
****
C40H46O7 L CAS 177723-37-4 (8912)
25,27-Diethoxycalix[4]arenecrown-5, 1,3-alternate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 22°C 100% C M 1996CPa (106771)1311
K(KA+L(org)=KAL(org))=9.77
Medium: CHCl3 saturated with H2O. Method: extraction of KA into CHCl3/L solution. HA is picric acid. For the cone conformation, K=5.71.
****
C40H46O8 L CAS 161282-95-7 (8680)
25,27-Dimethoxycalix[4]arene-crown-6;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=2.13 1995CUa (106776)1312
Medium: methanol, 0.01 M Et4NCl.
****
C40H48O8 L AN2DP(OEOEO)2E (2235)
3,4,5,6-Bis(3-methyl-5-(2-methoxy-5-methylbenzo))-2,7,10,13,16,19-hexaoxacyclodocosa-3,5-diene;

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         dis non-aq 25°C 100%  U   H                    1979KLa (106794)1313
                                        K(K(picrate)+L)=8.51
Medium: CHCl3
*************************************************************************
C40H50N20O10            L                     CAS 143902-45-8  (8935)
Decamethylcucurbit[5]uril;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         cal mixed  25°C  50%  C   H    K1=3.48         2000ZKb (106806)1314
Medium: 50% v/v formic acid/H2O. DH(K1)=-10 kJ mol-1, DS(K1)=33 J K-1
mol-1.
*************************************************************************
C40H52N4O4              L                     CAS 205066-94-0  (8760)
Tetraphenyl-1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraethanol;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         ISE non-aq 25°C 100%  C        K1=4.10         1998WLc (106822)1315
Medium: DMF, 0.05 M Et4NClO4.
*************************************************************************
C40H52O14P2             L                     CAS 127832-94-4  (5740)
2,3:9,10:15,16:21-Tetrabenzo-1,24-di(diethoxyphosphinyl)-2,5,8,11,14,17,20,23-octao
xatetracosane;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=5.2          1989BEa (106827)1316
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
*************************************************************************
C40H60N2O10           n L                     CAS 84993-07-7  (667)
15,15'-Decamethylenedinitrilodimethylidyne-bis-(octahydro-1,4,7,10,13-benzopentaoxa
cyclopentadeci
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         cal mixed  25°C 0.15M C        K1=3.12         1986LWa (106831)1317
-------------------------------------------------------------------------
K+         kin alc/w  23°C 100%  U        K1=4.08         1982HLc (106832)1318
Medium: MeOH. Data also for nonamethylene(K=4.65) and tetramethylene(K=4.18)
analogues
*************************************************************************
C40H62O12               L                     CAS 86116-05-4  (5648)
1,8-Bis(4'-(2,3-benzo-1,4,7,10,13,16-hexaoxacyclooctadecane))-octane;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         ISE alc/w  25°C  90%  U        K1=4.98   B2=9.12   1987KHa (106835)1319
```

90% w/w MeOH/H2O. Also data for the 1,4,7,10-tetraoxadecane-bridged ligand: K1=5.05; K2=3.93.

****

C40H64O12 L Nonactin CAS 6833-84-7 (4179)
Nonactin

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	C		K1=4.15	1977CEb	(106842)1320

Method: temperature jump relaxation. Medium: MeOH.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	vlt	non-aq	22°C	100%	U		K1=4.43	1974RKd	(106843)1321

Medium: 0.025 NBu4ClO4 in CH3CN

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	alc/w	25°C	100%	U	H	K1=4.49	1973ZFa	(106844)1322

Method:micro-calorimetry. Medium:MeOH. DH=-43.6 kJ mol-1, DS=-60.3 J K-1 m-1 In EtOH: K1=5.26, DH=-52.2 kJ mol-1, DS=74.4 J K-1 mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	oth	alc/w	30°C	100%	U		K1=3.59	1973ZFa	(106845)1323

Method: vapour pressure osmometry. Medium:MeOH. In EtOH, K1=4.61

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	alc/w	25°C	100%	U	H	K1=4.30	1971FCa	(106846)1324

Method:micro-calorimetry. Medium:MeOH. DH=-45.9 kJ mol-1, DS=-71 J K-1 m-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	nmr	non-aq	17°C	100%	U		K1=4.85	1970PCa	(106847)1325

Medium: KClO4,acetone. With 0.5 mol fraction water, K1=4.3

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	20°C	100%	U		K1=3.59	1968WPa	(106848)1326

Medium: MeOH, 0.1 M KSCN

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	oth	alc/w	30°C	100%	U		K1=3.80	1967PWb	(106849)1327

Medium: MeOH, 0.1 M KSCN. Method: osmotic vapour pressure

****

C40H68O11 HL CAS 28380-24-7 (5372)
Nigericin (Antibiotic K178);

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	alc/w	25°C	100%	U	H	K1=5.6	1971LFa	(106863)1328

Method: micro-calorimetry. Medium:MeOH. DH=-4.1 kJ mol-1, DS=93 J K-1 mol-1

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	?	100%	U		K1=5.18	1970LWb	(106864)1329

Medium:MeOH. In methylcellosolve:H20, 80:40, K1=4.48

****

C40H80O20 L (5376)
Dibenzo-60-crown-20;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	alc/w	25°C	100%	A		K1=3.90	1971FRa	(106868)1330

Medium: MeOH

****

C41H42O6 L CAS 151832-07-4 (6874)
9-(Dimethylethyl)-29,30,31,32,33-pentamethoxy-23-oxahexacyclotritriacontapentadecan
e;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	dis	non-aq	25°C	100%	U			1993HSa	(106870)1331
							K(K(picrate)+L)=7.72		

Medium: CDCl3. With 23-thia- analogue K=7.15

****

C41H66O12 L Monactin CAS 7182-54-9 (4180)
Monactin

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	C		K1=4.38	1977CEb	(106887)1332

Method: temperature jump relaxation. Medium: MeOH.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	vlt	non-aq	22°C	100%	U		K1=4.78	1974RKd	(106888)1333

Medium: 0.025 NBu4ClO4 in CH3CN

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	oth	alc/w	30°C	100%	U		K1=4.04	1973ZFa	(106889)1334

Method: vapour pressure osmometry. Medium:MeOH. In EtOH, K1=4.46

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	oth	alc/w	30°C	100%	U		K1=5.5	1967PWb	(106890)1335

Medium: MeOH, 0.1 M KSCN. Method: osmotic vapour pressure

****

C42H40O4P2 L (7153)
1,2-Bis(2-(2-(diphenylphosphinyl)ethyl)phenoxy)ethane

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	oth	non-aq	25°C	100%	U		K1=2.4	1995TEa	(106911)1336

Medium: THF:CHCl3 4:1 v/v. K as 2,4-dinitrophenolate

****

C42H40O4P2 L (6809)
1,6-Bis(2-Diphenylphosphinylphenyl)-3,4-dimethyl-2,5-dioxahexane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=3.1	1993BEb	(106916)1337

Medium: THF+CHCl3 4:1(vol)

****

C42H40O5P2 L CAS 163172-12-6 (2080)
Bis((2-diphenylphosphinylmethyl)phenyl)diethyleneglycol ether;

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

```
K+         con non-aq 25°C 100%  U        K1=3.9         1993BEb (106925)1338
Medium: THF+CHCl3   4:1(vol)
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=4.01        1989KSa (106926)1339
Medium: tetrahydrofuran/CHCl3 4:1 (vol)
********************************************************************************
C42H40O7P2              L                     CAS 95651-36-8  (2079)
1,7-Di(2-(diphenylphosphinylmethoxy)phenyl)-1,4,7-trioxaheptane;
(Ph2PO.CH2.O.C6H4.O.C2H4)2O
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=4.19        1989KSa (106935)1340
Medium: tetrahydrofuran/CHCl3 4:1 (vol)
--------------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=4.19        1989TKb (106936)1341
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
********************************************************************************
C42H50O7                L                     CAS 177723-38-5  (8793)
1,3-Diisopropoxycalix[4]arene-crown-5, 1,3-alternate;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         sp  non-aq 25°C 100%  C        K1=>=10        2000PBa (106950)1342
Medium: MeOH.
--------------------------------------------------------------------------------
K+         dis non-aq 22°C 100%  C    M                  1996CPa (106951)1343
                                        K(KA+L(org)=KAL(org))=9.83
Medium: CHCl3 saturated with H2O. Method: extraction of KA into CHCl3/L
solution. HA is picric acid. For the cone conformation, K=5.27.
********************************************************************************
C42H54O15               L                     CAS 104512-99-4  (7749)
Tris-(15-Crown-5)triphenylene ;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         ISE mixed  25°C  50%  C        K1=4.6         1991LMc (106969)1344
                                        K(KL+K)=3.5
                                        K(K2L+K)=1.7
Method: K ion selective glass electrode.  Medium: 50% w/w MeOH/DMF.
********************************************************************************
C42H68N2O4              L                     CAS 188593-77-3  (8954)
2,17-Didodecyl-6,7,9,10,12,13-hexahydro-dibenzo[b,f][1,8,11,14,4,5]tetraoxadiazacyc
lohexadecine
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         sp  non-aq  RT  100%  C  I     K1=3.35        2000GDa (106973)1345
Medium: acetonitrile. In MeOH, K1=3.15.
********************************************************************************
```

C42H68O12 L CAS 20261-85-2 (5373)
Dinactin;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=4.63 1977CEb (106980)1346
Method: temperature jump relaxation. Medium: MeOH.

K+ vlt non-aq 22°C 100% U K1=5.24 1974RKd (106981)1347
Medium: 0.025 NBu4ClO4,CH3CN

K+ oth alc/w 30°C 100% U K1=3.73 1973ZFa (106982)1348
Method: vapour pressure osmometry. Medium: MeOH
****
C43H42O4P2 L (7156)
1,3-Bis((2-diphenylphosphinyl)phenoxy)propane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ oth non-aq 25°C 100% U K1=2.4 1995TEa (106999)1349
Medium: THF:CHCl3 4:1 v/v. K as 2,4-dinitrophenolate. Also other si
milar ligands
****
C43H42O6P2 L (5734)
1,7-Di((2-diphenylphosphynylmethoxy)phenyl-1,7-dioxaheptane;
(Ph2PO.CH2O.C6H4.O.C2H4)2CH2

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=2.11 1989TKb (107004)1350
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
****
C43H54N2O10 L (668)
4,4'-Diaminodiphenylmethane-N,N'-dimethenyl-di(3-benzo-15-crown-5);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal mixed 25°C 0.15M C K1=2.79 1986LWa (107010)1351
****
C43H70O12 L CAS 7561-71-9 (5374)
Trinactin;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ vlt non-aq 22°C 100% U K1=5.44 1974RKd (107031)1352
Medium: 0.025 NBu4ClO4 in CH3CN
****
C44H36O4P2 L (6810)
1,2-Bis(2-Diphenylphosphinylphenylmethoxy)benzene; C6H4(OCH2.C6H4(PO(C6H5)2)2

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=2.4         1993BEb (107090)1353
Medium: THF+CHCl3   4:1(vol)
*************************************************************************
C44H42O6P2              L                        (6806)
1,12-Bis(2-Diphenylphosphinylphenyl)-2,5,8,11-tetraoxadodecane;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=4.4         1993BEb (107109)1354
Medium: THF+CHCl3   4:1(vol)
*************************************************************************
C44H44O5P2              L                        (5735)
1,7-Di((2-diphenylphosphinylmethoxy)phenyl)-4-oxaheptane; (Ph2PO.CH2O.C6H4.C3H6)2O
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=2?          1989TKb (107113)1355
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
*************************************************************************
C44H44O5P2              L                        (5733)
1,7-Di(2-(diphenylphosphynylethyl)phenyl)-1,4,7-trioxaheptane;
(Ph2PO.C2H2.C6H4.OC2H4)2O
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         oth non-aq 25°C 100%  U        K1=2.3         1995TEa (107117)1356
Medium: THF:CHCl3 4:1 v/v. K as 2,4-dinitrophenolate
-------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=2.11        1989TKb (107118)1357
Medium: tetrahydrofuran/CHCl3 4:1 (volume)
*************************************************************************
C44H44O6P2              L                     CAS 126763-09-5  (7790)
1,8-Bis[2-(diphenylphosphinylmethyl)phenoxy]-3,6-dioxaoctane;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         cal non-aq 25°C 100%  U   H    K1=1.75   B2= 3.68  1998SBb (107127)1358
Medium: MeCN  Calorimetric titration of LiNCS. DH(K1)=-20.6 kJ mol-1
DH(B2)=-6.9
*************************************************************************
C44H48O10               L                     CAS 155500-94-0  (7357)
5,17-Di-tert-butyl-26,28-bis(carboethoxymethoxy)calix[4]diquinone;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  non-aq 23°C 100%  U        K1=4.8         1997BGa (107132)1359
Medium: 4/1 v/v CH2Cl2/CH3CN; 0.1 M Bu4NBF4
Data also for other related calix[4]diquinones
```

****
C44H50N2O6 L (9016)
4,13-Bis[2-(9-anthryloxy)ethyl]-4,13-diaza-18-crown-6;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 20°C 100% C K1=5.85 2002MTb (107136)1360
Medium: methanol.
****
C44H50N2O10 H2L CAS 329183-28-0 (8807)
25,27-Bis(carboxymethoxy)-26,28-bis[(N,N-diethylaminocarbonyl)methoxy]calix[4]arene
;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl non-aq 25°C 100% C K1=4.89 2000ABb (107143)1361
B(K2L)=7.74
Medium: MeOH, 0.05 M Et4NClO4.
****
C44H52N4O8 L CAS 246035-33-6 (2925)
25,27-Bis(N,N-diethylaminocarbonylmethoxy)-26,28-bis(aminocarbonylmethoxy)calix[4]a
rene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=4.1 1999USa (107158)1362
Medium: MeOH, 0.10 M Et4NCl
****
C44H52O10 L CAS 163317-54-2 (9089)
1,3-Calix[4]-bis-crown-5;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C IH K1=4.47 1996AAe (107164)1363
Medium: acetonitrile. By calorimetry, DH(K1)= -59 kJ mol-1, DS(K1)=-114
J K-1 mol-1. In 100% MeOH, K1=4.76, DH(K1)=-57.0, DS(K1)=-100.
****
C44H54O8 L CAS 162989-76-6 (8794)
1,3-Diisopropoxycalix[4]arene-crown-6, 1,3-alternate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=4.6 2000PBa (107170)1364
Medium: MeOH.
****
C44H54O8 L CAS 161282-98-0 (8679)
25,27-Bis(1-proplyoxy)calix[4]arene-crown-6, 1,3-alternate;

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

K+ EMF non-aq 25°C 100% C K1=4.3 1995CUa (107175)1365
Medium: methanol, 0.01 M Et4NClO4. Method: Ag-competitive potentiometry.
****
C44H54O8 L CAS 161282-96-8 (8678)
25,27-Bis(2-proplyoxy)calix[4]arene-crown-6, 1,3-alternate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C H K1=4.5 1995CUa (107181)1366
Medium: methanol, 0.01 M Et4NCl. Alternative method: Ag-competitive potentiometry. By calorimetry, DH(K1)=-18.1 kJ mol-1, DS(K1)=25 J K-1 mol-1.
****
C44H56O4 H4L (7294)
4-Tert-butyl-calix[4]arene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% U K1=1.2 1996ABa (107186)1367
Medium: MeCN
****
C44H72N4O8 L CAS 61894-23-3 (8580)
7,16:25,34-Bis(ethanoxyethanoxyethano)dibenzo[1,4,17,20,7,14,23,30]tetraoxatetraazacyclodotriac..

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE alc/w 25°C 95% C K1=3.6 1977LSc (107193)1368
K(KL+K)=2.7
Medium: 90% (w/w) MeOH/H2O, 0.1 M Et4NBr. In H2O, K1=ca.1.5.
****
C45H39O3P3 L CAS 73218-92-5 (5679)
1,3,5-Tris(diphenylphosphinylmethyl)-benzene; C6H3(CH2.PO(C6H5)2)3

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=4.0 1984YKa (107212)1369
Medium: tetrahydrofuran + CHCl3 4:1, K as 2,4-dinitrophenolate
****
C45H48N3O3P3 L CAS 90179-28-5 (5682)
N,N',N"-tris(Diphenylphosphinylmethyl)-1,4,7-triazacyclononane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=3.2 1984YKa (107225)1370
Medium: tetrahydrofuran + CHCl3 4:1, K as 2,4-dinitrophenolate
****
C46H40O6P2 L (6814)
1,2-Bis((2-(2-diphenylphosphinyl)phenoxy)ethoxy)benzene;

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

---
K+ con non-aq 25°C 100% U K1=4.9 1991EBa (107240)1371
Solvent : Tetrahydrofurane + CHCl3 4:1(vol)
****
C46H46N2O4 L CAS 185118-12-1 (7824)
N,N'-Bis(1-pyrenylmethyl)-1,4,10,13-tetraoxa-7,16-diazacyclooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp mixed 25°C 90% C 1997KKa (107249)1372
K(KSCN+L)=3.38
Method: fluorescence emission. Medium: MeOH/CHCl3 (9:1 v/v).
****
C46H46N2O16 H4L (7071)
7,16-Bis[2-(2,4-dicarboxyphenyl)-5-methoxy-1-benzofuran-6-yl]-tetraoxa-7,16-diazacy
clooctadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp none RT 0 U K1=2.22 1994CGa (107256)1373
Method: fluorimetry. L=7,16-bis[2-(2,4-dicarboxyphenyl)-5-methoxy-1-benzo-
furan-6-yl]-1,4,10,13-tetraoxa-7,16-diazacyclooctadecane
****
C46H46O7P2 L (6807)
1,15-Bis(2-Diphenylphosphinylphenyl)-2,5,8,11,14-pentaoxapentadecane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=4.8 1993BEb (107259)1374
Medium: THF+CHCl3 4:1(vol)
****
C46H48O6P2 L (7155)
1,8-Bis(2-(2-(diphenylphosphinyl)ethyl)phenoxy)-3,6-dioxyoctane
---
Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ oth non-aq 25°C 100% U K1=2.8 1995TEa (107270)1375
Medium: THF:CHCl3 4:1 v/v. K as 2,4-dinitrophenolate. Also other si
milar ligands
****
C46H48O9P2 L CAS 95651-38-0 (2082)
1,5-Bis(2-(2-(diphenylphosphinylmethoxy)ethoxy)phenoxy)-3-oxapentane;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=4.73 1989KSa (107279)1376
Medium: tetrahydrofuran/CHCl3 4:1 (vol)
****
C48H44O8P2 L CAS 95651-37-9 (2081)
1,2-Bis(2-(2-(diphenylphosphinylmethoxy)phenoxy)ethoxy)benzol;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U			1989KSa	(107360)1377

Medium: tetrahydrofuran/CHCl3 4:1 (vol)

****

C48H50O8P2 L (6808)

1,18-Bis(2-Diphenylphosphinylphenyl)-2,5,8,11,14,17-hexaoxananodecane;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=5.3	1993BEb	(107364)1378

Medium: THF+CHCl3 4:1(vol)

****

C48H54O10P4 L CAS 97910-30-0 (2084)

Tris((2-(diphenylphosphinylmethoxy)ethoxy)methyl)phosphine oxide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	con	non-aq	25°C	100%	U		K1=4.12	1989KSa	(107387)1379

Medium: tetrahydrofuran/CHCl3 4:1 (vol)

****

C48H60O8 H2L R-Bu-Calixarene CAS 147513-53-9 (6705)

4-tert-Butylcalix[4]arenedicarboxylic acid;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	alc/w	25°C	100%	C		K1=4.7 B(K2L)=8.3 B(KHL)=12.4	1993ABb	(107402)1380

Medium: MeOH, 0.01 M Et4NClO4. Data also for di-tert-butyl ester

****

C48H60O12 L CAS 157769-14-7 (9090)

1,3-Calix[4]-bis-crown-6;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	C	IH	K1=4.12	1996AAe	(107410)1381

Medium: acetonitrile.By calorimetry, DH(K1)=-17 kJ mol-1, DS(K1)=23 J K-1 mol-1. In 100% MeOH, K1=4.1, DH(K1)=-31.7, DS(K1)=-28.

****

C48H60O16 H4L (8251)

5,11,17,23-Tetrahydroxycalix[4]arene-bis(crown-6);

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	C		K1=4.4	2001PCa	(107415)1382

Medium: methanol

****

C48H96N2O4 L CAS 72469-41-1 (5351)

N,N-Dioctadecyl-N',N'-dipropyl-3,6-dioxaoctanediamide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	oth/un	21°C	100%	C		K1=4.7	1999CPa	(107446)1383

Medium: PVC/DOS ion selective electrode membrane (DOS: bis(2-ethylhexyl)-sebacate). Data for structurally related ionophores.

****

C52H64O12 H4L R-Bu-Calixarene CAS 113215-72-8 (6704)
5,11,17,23-Tetra-(t-butyl)-25,26,27,28-tetrakis[(hydroxycarbonyl)methoxy]calix[4]arene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	gl	alc/w	25°C	100%	C		K1=9.05 B(KHL)=19.77 B(KH2L)=29.35 B(KH3L)=37.35	1993ABb	(107489)1384

In methanol; 0.01 M (CH3CH2)4NClO4

****

C52H68N4O8 CAS 150588-24-2 (3074)
25,26,27,28-Tetrakis-(N,N-diethylaminocarbonylmethoxy)calix[4]arene; L

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	C	H	K1=5.0	1999USa	(107498)1385

Medium: MeOH, 0.10 M Et4NCl. DH(K1)=-33.3 kJ mol-1

****

C52H68N4O8 L (4823)
25,27-Bis(N,N-diethylaminocarbonylmethoxy)-26,28-bis(N-butylaminocarbonylmethoxy)calix[4]arene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	C		K1=2.2	1999USa	(107507)1386

Medium: MeOH, 0.10 M Et4NCl

****

C52H72O6 L (9263)
5,11,17,23-Tetra(t-butyl)-25,27-dimethoxy-26,28-dimethoxyethoxycalix[4]arene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	C		K1=3.36	2004BCb	(107525)1387

Medium: acetonitrile, 0.01 M Et4NClO4.

****

C54H74O7 L (7302)
25,27-Dimethoxy-4-tert-butylcalix[4]arene-crown-5;

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

K+ dis non-aq 22°C 100% U K1=8.48 1996SCa (107541)1388
Medium: CHCl3 saturated with H2O
Data also for other substituted t-butylcalix[4]arene-crown-5 analogues
****
C54H90N6O18 L Valinomycin CAS 2001-95-8 (2142)
Valinomycin, Potassium Ionophore

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 22°C 100% C M 1996CPa (107549)1389
K(KA+L(org)=KAL(org))=9.35
Medium: CHCl3 saturated with H2O. Method: extraction of KA into CHCl3/L solution. HA is picric acid.

K+ cal alc/w 25°C 100% U H K1=4.90 1977ILa (107550)1390
Medium: MeOH. DH(K1)=-19.0 kJ mol-1

K+ sp alc/w 25°C 100% U K1=4.48 1972FEb (107551)1391
Medium: methanol/0.1M tetrabutyl-ammonium-perchlorate

K+ oth alc/w 25°C 100% U H 1971FCa (107552)1392
Method: micro-calorimetry. Medium: MeOH. DH=-19 kJ mol-1
In EtOH: K1=6.08, DH=-37.2, DS=9.02 J K-1 mol-1

K+ gl alc/w 20°C 100% U K1=>3.9 1968WPa (107553)1393
Medium: MeOH, 1 M KI
****
C56H60O12 L CAS 157769-17-0 (9091)
1,3-Calix[4]-bis-benzo-crown-6;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=4.32 1996AAe (107577)1394
Medium: acetonitrile.
****
C56H62O14 HL CAS 474540-94-8 (8852)
25,27-[4-Methyl-2-oxochromene-6,7-diylbis[2-(2-oxyethoxy)ethoxy]]-26,28-[ethylenebis[2-(2-oxyeth;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ oth non-aq RT 100% C I K1=5.03 2002LAa (107582)1395
K(KL+K)=2.47
B(K2L)=7.5
Method: fluorimetry. Medium: EtOH. In CH3CN, K1=5.03, K(KL+K)=2.3, B(K2L)=7.33.
****
C56H64O10 L CAS 405108-40-9 (8249)
1,2-Di-O-[2-(2-benzyloxyethoxy)ethyl]-3,4,5,6-tetra-O-benzyl-myo-inositol;

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         dis non-aq 25°C 100%  C                        2001SSb (107586)1396
                                        K(K.pic+L(org)=KL.pic)=0.72
Distribution of picrate salt into CHCl3/HL.
K: K.pic(aq)+L(org)=KL.pic(org). Data for series of myo-inositol ligands
*************************************************************************
C56H72O8                L                       CAS 123311-74-0  (6160)
Tetramethyl-t-butylcalix[4]arenetetraketone;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  alc/w  25°C 100%  U  I     K1=3.1          1989ACb (107597)1397
Medium: MeOH. In CH3CN, K1=4.4
*************************************************************************
C56H72O12               L                         (8751)
Tetramethyl-4-t-Butylcalix[4]arenetetraethanoate;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         EMF non-aq 25°C 100%  C  IH    K1=4.01         1995DGa (107601)1398
Medium: acetonitrile, 0.05 M Et4NClO4. Competitive method: Ag/Ag+
electrode. DH(K1)=-40.6 kJ mol-1, DS=-59.4. Also data in benzonitrile.
*************************************************************************
C56H78O8                L                       CAS 122356-76-7  (8681)
Tetra-tert-butyl-1,3-dimethoxycalix[4]arene-crown-6;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  non-aq 25°C 100%  C        K1=2.54         1995CUa (107606)1399
Medium: methanol, 0.01 M Et4NCl.
*************************************************************************
C56H80O8                L                         (9259)
5,11,17,23-Tetra(t-butyl)-25,26,27,28-tetramethoxyethoxycalix[4]arene;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  non-aq 25°C 100%  C   H    K1=4.51         2004BCb (107613)1400
Medium: acetonitrile, 0.01 M Et4NClO4.  By calorimetry: DH(K1)=-28.3
kJ mol-1, DS(K1)=-8.7 J K-1 mol-1.
*************************************************************************
C58H78O11              HL                       CAS 465527-74-6  (9287)
7,13,19,25-Tetra-t-butyl-28-methoxy-27,29,30-triethylacetate-2,3-dihomo-3-oxacalix[
4]arene;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  alc/w  25°C 100%  C        K1=2.6          2001MAa (107622)1401
Medium: MeOH, 0.01 M Et4NCl.
*************************************************************************
```

C58H80O10 L (9264)
5,11,17,23-Tetra-t-butyl-25,27-di(2-methoxyethoxy)-26,28-di(ethylacetate)calix[4]ar
ene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C H K1=5.06 2004BCb (107631)1402
Medium: acetonitrile, 0.01 M Et4NClO4. DH(K1)=-44.5 kJ mol-1,
DS(K1)=-52.3 J K-1 mol-1.
****
C60H54NO6P3 L (8067)
Tris[2-diphenylphosphoryl)phenoxyethyl]amine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal non-aq 25°C 100% U H K1=2.44 B2= 4.49 1998SBb (107638)1403
Medium: MeCN Calorimetric titration of LiNCS. DH(K1)=-16.6 kJ mol-1
DH(B2)=-13.1
****
C60H80O12 L CAS 97600-39-0 (6158)
Tetraethyl-4-t-butylcalix[4]arenetetraethanoate;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% C H K1=4.35 2002ASc (107649)1404
Medium: acetonitrile. DH(K1)=-42.56 kJ mol-1, DS(K1)=-59.30 J K-1 mol-1.

K+ EMF non-aq 25°C 100% C IH K1=4.04 1995DGa (107650)1405
Medium: acetonitrile, 0.05 M Et4NClO4. Competitive method: Ag/Ag+
electrode. DH(K1)=-45.7 kJ mol-1, DS=-76. Also data for tetrabutyl deriv.

K+ sp alc/w 25°C 100% U I K1=2.4 1989ACb (107651)1406
Medium: MeOH. In CH3CN, K1=4.5
****
C60H82N2O10 L CAS 155377-20-1 (8806)
5,11,17,23-Tetra-butyl-25,27-bis(carboxymethoxy)-bis[(N,N-diethylaminocarbonyl)meth
oxy]calix[4]ar

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ gl non-aq 25°C 100% C K1=4.81 2000ABb (107666)1407
B(K2L)=9.10
Medium: MeOH, 0.05 M Et4NClO4.
****
C60H84N4O8 L CAS 246035-32-5 (2735)
25,27-Bis(N,N-diethylaminocarbonylmethoxy)-26,28-bis(aminocarbonylmethoxy)-t-butylc
alix[4]arene;

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

K+ sp non-aq 25°C 100% C K1=<1 1999USa (107679)1408
Medium: MeOH, 0.10 M Et4NCl
****
C62H84O14 L CAS 135581-11-2 (8630)
9,23-Dioxpentacyclo[23.3.1.13,7.111.15.117.21]dotriacontane, ethanoic acid derivative;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=3.9 1991ACc (107694)1409
Medium: acetonitrile, 0.01 M Et4NClO4.
****
C62H111N11O12 L CAS 59865-13-3 (9048)
Cyclosporin A;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ oth non-aq 25°C 100% C K1=<1 2003CGa (107717)1410
Method: CD titration. Medium: acetonitrile.
****
C63H60NO6P3 L (8437)
Tris[2-(diphenylphosphorylmethyl)phenoxyethyl]amine;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal non-aq 25°C 100% U H K1=2.02 B2= 5.01 1998SBb (107719)1411
Medium: MeCN Calorimetric titration of LiNCS. DH(K1)=-12.6 kJ mol-1
DH(B2)=-4.3
****
C64H60O12 L CAS 211870-40-5 (4258)
Calix[4]arene-bis(dibenzo)crown-6;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C H K1=5.22 1999LDa (107734)1412
B(K2L)=8.05
Medium: acetonitrile, 0.01 M Et4NClO4
By calorimetry, DH(K1)=-10.7 kJ mol-1, DH(K2L)=-23.8 kJ mol-1
****
C64H62O6P4 L (6813)
1,2-Bis(4,5-di(diphenylphosphinyl)-pent-1-oxy)benzene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=3.1 1990EAb (107739)1413
Medium: THF+CHCl3 4:1(vol). Metal as 2,4-dinitrophenolate
****
C64H64O12 L CAS 162898-44-4 (9092)
1,3-Calix[4]-bis-naphtho-crown-6;

```
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  non-aq 25°C 100%  C        K1=4.2         1996AAe (107744)1414
Medium: acetonitrile.
*************************************************************************
C64H64O16               L                     CAS 474540-93-7  (8853)
25,27:26,28-Bis[4-methyl-2-oxochromene-6,7-diylbis[2-(2-oxyethoxy)ethoxy]]calix[4]a
rene;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         oth non-aq  RT  100%  C  I     K1=4.81        2002LAa (107749)1415
                                        K(KL+K)=2.46
                                        B(K2L)=7.29
Method: fluorimetry. Medium: EtOH. In CH3CN, K1=4.25, K(KL+K)=2.19,
B(K2L)=6.44.
*************************************************************************
C64H72N4O4P4            L                     CAS 104786-07-4  (2065)
1,4,7,10-Tetra(diphenylphosphinylethyl)-1,4,7,10-tetraazacyclododecane;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         con non-aq 25°C 100%  U        K1=5.04        1986STb (107752)1416
Medium: THF:CHCl3 4:1 v/v. M as 2,4-dinitrophenolate
*************************************************************************
C64H80O6                L                      (9262)
5,11,17,23-Tetra-t-butyl-25,27-di(phenylmethoxy)-26,28-di(2-methoxyethoxy)-calix[4]
arene;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  non-aq 25°C 100%  C   H    K1=2.69        2004BCb (107761)1417
Medium: acetonitrile, 0.01 M Et4NClO4. DH(K1)=-8.4 kJ mol-1,
DS(K1)=23.1 J K-1 mol-1.
*************************************************************************
C64H86O7                L                     CAS 182684-17-9  (7455)
4-tert-Butylcalix[5]crown-4 trimethylester;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  alc/w  25°C 100%  U        K1=2.82        1996AAc (107768)1418
Medium MeOH, 0.1M Et4NCl. Data also for the crown-5 and crown-6 analogues
*************************************************************************
C66H80O8                L                      (9261)
5,11,17,23-Tetra(t-butyl)-25,27-diethoxycarbonylmethoxy-26,28-diphenylmethoxycalix[
4]arene;
-------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
-------------------------------------------------------------------------
K+         sp  non-aq 25°C 100%  C        K1=2.90        2004BCb (107776)1419
```

Medium: acetonitrile, 0.01 M Et4NClO4.
****
C68H76N4O4 L CAS 123207-92-1 (7812)
5,11,17,23-Tetra-t-butyl-[25,26,27,28-tetrakis(2-pyridylmethyl)oxy]calix(4)arene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ EMF non-aq 25°C 100% C IH K1=3.17 1999DCa (107784)1420
Medium: acetonitrile, 0.05 M Bu4NClO4. Method: by competition with Ag+.
By calorimetry: K1=3.10, DH(K1)=-18.47 kJ mol-1, DS(K1)=-1.9 J K-1 mol-1.
****
C68H92N4O8 L CAS 133801-01-1 (7184)
4-tert-Butylcalix[4]arene tetrapyrrolidinylamide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ cal alc/w 25°C 100% U H 1995ABc (107790)1421
Medium: 100% Methanol. DH(K1)=-32.6 kJ mol-1, DS(K1)=-6 J K-1 mol-1.
****
C68H96O8 L (6161)
Tetra-t-butyl-4-t-butylcalix[4]arenetetraketone;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp alc/w 25°C 100% U K1=5.0 1989ACb (107794)1422
Medium: MeOH, 0.1 M Et4NCl
****
C68H96O12 L R-Bu-Calixarene CAS 170127-17-0 (2961)
25,26,27,28-Tetrakis(butoxycarbonylmethoxy)-5,11,17,23-tetra-t-butylcalix[4]arene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp alc/w 25°C 100% U K1=2.7 1992ABb (107798)1423
Medium: MeOH, 0.01 M Et4NClO4. Data also for many substituted p-tert-butyl-
calix[4]arenes
****
C68H100N4O8 L CAS 246035-35-8 (3034)
25,27-Bis(N,N-diethylaminocarbonylmethoxy)-26,28-bis(N-butylaminocarbonylmethoxy)-t
-butylcalix[4]

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C K1=2.3 1999USa (107804)1424
Medium: MeOH, 0.10 M Et4NCl
****
C68H100N4O8 L CAS 114155-16-7 (7183)
4-tert-Butylcalix[4]arene tetradiethylacetamide;

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

K+ cal alc/w 25°C 100% U IH 1995ABc (107813)1425
Medium: 100% Methanol. DH(K1)=-42.4 kJ mol-1, DS(K1)=-31 J K-1 mol-1.
In acetonitrile, K1>8.5, DH(K1)=-64 kJ mol-1, DS(K1)=>-52 J K-1 mol-1.

K+ dis non-aq 20°C 100% C M 1988AGa (107814)1426
K(K+A+L(org)=KAL(org))=7.45
Method: extraction of metal picrate into CHCl3/L solution. HA is picric acid.
****
C69H102N4O9 L CAS 116352-85-3 (9286)
para-t-Butyldihomooxacalix[4]arene tetra(diethyl)amide;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ EMF alc/w 25°C 100% C H K1=6.73 2004MFa (107834)1427
Competitive potentiometry with Ag+. Medium: MeOH, 0.01 M Et4NCl.
By calorimetry, DH(K1)=-38.1 kJ mol-1, DS(K1)=0 J K-1 mol-1.
****
C72H68O10P4 L CAS 88928-02-3 (5680)
Tetrakis-4',5',4",5"-(diphenylphosphinylmethyl)-2,3:11,12-dibenzo-18-crown-6;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ con non-aq 25°C 100% U K1=3.95 1985YKa (107846)1428
Medium: EtOH+CHCl3 1:1; M is used in nitrophenolate form
****
C73H88O7 L Calixspherand CAS 154747-96-3 (7186)
2,26,31,41-Tetrakis(1,1-dimethylethyl)-45-ethoxy-35,38,44,46-tetramethoxy-9,14,19-trimethylcalix-
---
Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ kin mixed 25°C 0 U 1994BHb (107852)1429
K(KX+L)=10.41
Medium: CDCl3, saturated with H2O. X=picrate Data also for 2 analogues calixspherands
****
C75H100O15 L CAS 152495-34-6 (7033)
Penta-tert-butylpentakis(ethoxycarbonylmethyloxy)calix[5]arene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ EMF alc/w 25°C 100% U K1=5.3 1993BMa (107859)1430
Medium: MeOH, 0.1 M Et4NClO4.
****
C76H80O8 L (6162)
5,11,17,23-Tetra-t-butyl-25,26,27,28-tetra(benzoyl)methoxycalix[4]arene;

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

K+ sp non-aq 25°C 100% U K1=5.1 1989ACb (107869)1431
Medium: CH3CN
****
C76H98N2O16 L CAS 170514-24-6 (7124)
25,27-Bis((4-benzo-15-crown-5)aminocarbonylmethoxy)calix[4]arene;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ nmr non-aq RT 100% U 1995BDa (107875)1432
K(KL(PF6)+Cl)=3.54
K(KL(PF6)+NO3)=3.11
K(KL(PF6)+HSO4)=3.75
K(KL(PF6)+H2PO4) > 4
Medium: CD3CN
****
C77H82O9 L CAS 253317-20-3 (9288)
p-Tert-butyldihomooxacalix[4]arene tetraphenyketone;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp alc/w 25°C 100% C I K1=4.0 1999MAb (107893)1433
Medium: MeOH, 0.01 M Et4NCl. In acetonitrile, K1=3.4.
****
C78H90O10P2 L CAS 160638-26-6 (9130)
5,11,17,23-Tetra-t-butyl-bis(diethylcarbamoylmethoxy)-bis(diphenylphosphinoylmethox
y)calix[4]aren

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp alc/w 20°C 100% C K1=3.69 2003YVa (107899)1434
Medium: 100% EtOH, 0.01 M Et4NBr. Ligand is cone isomer. For paco isomer,
K=4.21. Also data for bis(diethyl ester) analogues.
****
C80H112O24 L CAS 175349-59-4 (7498)
C-Heptylcalix[4]resorcinarene octa-alpha-(methyl ethanoate);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% U 1995FDa (107904)1435
K=4.12
Medium: CDCl3. Method: by H2O/CDCl3 extraction of picrate salt.
K: MA(org)+L(org)=MLA(org) where A=picrate.
****
C85H80O15 L CAS 269057-77-4 (3302)
5,11,17,23,29-Pentabenzylcalix[5]arene-31,32,33,34,35-pentaethanoate pentamethyl
ester;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ sp non-aq 25°C 100% C I K1=5.15 2000AAa (107911)1436

Medium: methanol, 0.01 M Et4NCl. Also data for acetonitrile, 0.01 M Et4NCl and for the pentaethyl ester.

****

C85H120O15 L CAS 152495-35-7 (7034)
Penta-tert-butylpentakis(tert-butoxycarbonylmethoxy)calix[5]arene;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	EMF	alc/w	25°C	100%	U		K1=6.1	1993BMa	(107916)1437

Medium: MeOH, 0.1 M Et4NClO4.

****

C88H78N2O12 L CAS 351183-45-4 (8252)
1,3-Calix[4]bis(10-cyano-9-anthrylmethyl-o-benzocrown-6);

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	mixed	25°C	50%	C		K1=5.7 K(KL+K)=2.7	2001JDa	(107921)1438

Medium: 50% v/v CH2Cl2/MeOH, 0.01 M benzyl(trimethyl)ammonium hydroxide.
Method: fluorescence spectroscopy.

****

C88H96N8O12S4 L CAS 639027-46-6 (9277)
Tetra(benzoylthiocarbamido)cavitand;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	NaCl	rt	0.01M	C		K1=<2	2003MGa	(107927)1439

Method: segmented sandwich membrane ISE.

****

C88H96N8O16 L CAS 639030-70-9 (9278)
Tetra(benzoylcarbamido)cavitand;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	ISE	NaCl	rt	0.01M	C		K1=<3	2003MGa	(107935)1440

Method: segmented sandwich membrane ISE.

****

C90H120O18 L CAS 92003-62-8 (6159)
Hexaethyl-4-t-butylcalix[6]arenehexaethanoate;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	cal	non-aq	25°C	100%	C		K1=6.14	1997DZa	(107940)1441

Medium: benzonitrile. DH(K1)=-47.68 kJ mol-1, DS(K1)=-42.4 J K-1 mol-1.

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	U	I	K1=5.1	1989ACb	(107941)1442

Medium: CH3CN

****

C90H130O15 L CAS 269057-78-5 (3334)
5,11,17,23,29-Penta-tert-octylcalix[5]arene-31,32,33,34,35-pentaethanoate

pentamethyl ester;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ EMF non-aq 25°C 100% C I K1=5.29 2000AAa (107950)1443
Medium: methanol, 0.01 M Et4NCl. Method: by competition with Ag+.
Also data for acetonitrile, 0.01 M Et4NCl and the pentaethyl ester.
****
C96H144O24 L CAS 169888-22-6 (7534)
C-Undecylcalix[4]resorcinarene octa-alpha-(methyl ethanoate);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% U 1995FDa (107965)1444
K=4.01
Medium: CDCl3. Method: by H2O/CDCl3 extraction of picrate salt.
K: MA(org)+L(org)=MLA(org) where A=picrate.
****
C104H160O24 L CAS 175349-60-7 (7494)
C-Heptylcalix[4]resorcinarene octa-alpha-(tert-butyl ethanoate);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% U 1995FDa (107977)1445
K=4.60
Medium: CDCl3. Method: by H2O/CDCl3 extraction of picrate salt.
K: MA(org)+L(org)=MLA(org) where A=picrate.
****
C104H168N8O16 L CAS 175349-61-8 (7483)
C-Heptylcalix[4]resorcinarene octa-alpha-(N,N-diethyl acetamide);

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ dis non-aq 25°C 100% U 1995FDa (107982)1446
K=5.76
Medium: CDCl3. Method: by H2O/CDCl3 extraction of picrate salt.
K: MA(org)+L(org)=MLA(org) where A=picrate.
****
C112H120N4O16P4 L CAS 195455-62-0 (9276)
1,21,23,25-Tetrapentyl-7,11,15,28-tetra[(diphenylphosphinyl)acetamidomethylene]
cavitand;

Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo
---
K+ ISE NaCl rt 0.01M C K1=6.7 2003MGa (107991)1447
Method: segmented sandwich membrane ISE.
Phosphonic acid diethyl ester derivative: K1=10.2
****
C120H192O24 L CAS 175349-58-3 (7495)
C-Undecylcalix[4]resorcinarene octa-alpha-(tert-butyl ethanoate);

```
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         dis non-aq 25°C 100%  U                        1995FDa (108008)1448
                                          K=4.65
Medium: CDCl3. Method: by H2O/CDCl3 extraction of picrate salt.
K: MA(org)+L(org)=MLA(org) where A=picrate.
********************************************************************************
C120H200N8O16           L                     CAS 169888-21-5  (7490)
C-Undecylcalix[4]resorcinarene octa-alpha-(N,N-diethyl acetamide);
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         dis non-aq 25°C 100%  U                        1995FDa (108019)1449
                                          K=5.73
Medium: CDCl3. Method: by H2O/CDCl3 extraction of picrate salt.
K: MA(org)+L(org)=MLA(org) where A=picrate.
********************************************************************************
Polymer               H2L    X-14885A           (4547)
Antibiotic X14885A, calcium ionophore
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         gl  alc/w  25°C 100%  U        K1=3.0         1989ABb (108075)1450
Medium: MeOH
********************************************************************************
Polymer                       Enniatin A       CAS 2303-13-1  (4176)
Enniatin A
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         gl  alc/w  20°C 100%  U        K1=3.08        1968WPa (108164)1451
Medium: MeOH, 1 M KI
********************************************************************************
Polymer                       Myosin A           (3529)
Myosin A;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         EMF oth/un  5°C    ?  U T      K1=2.9    B2=5.20   1957LSa (108261)1452
For Myocin B, 5 C: K1=2.9, K2=2.3; 27 C: K1=2.9, K2=1.7
********************************************************************************
Polymer                                      (4181)
Phosphatidic acid;
--------------------------------------------------------------------------------
Metal      Mtd Medium Temp Conc Cal Flags Lg K values       Reference ExptNo
--------------------------------------------------------------------------------
K+         gl  oth/un 24°C 0.10M U        K1=0.9         1966AKa (108270)1453
********************************************************************************
Polymer                                      (4204)
```

Pyruvate kinase;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	R4N.X	25°C	0.10M	U		K'=0.92	1966SSc (108403)	1454

Medium: Me4NCl. See reference for definitions

****

Polymer (1966)
poly(Benzo-1,4,7,10,13,16-hexaoxacyclooctadecane)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	U		K1=8.39	1979KMb (108425)	1455

Medium: CHCl3

****

Polymer (1965)
poly(Benzo-1,4,7,10,13-pentaoxacyclopentadecane)

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
K+	sp	non-aq	25°C	100%	U		K1=10.3	1979KMb (108429)	1456

Medium: CHCl3

REFERENCES

2005ZZa T Zelenina,O Zelenin; Koord.Khim.,31,253 (2005)
2004BCb L Baklouti,J Cherif,R Abidi,F Arnaud-Neu; Org.Biomol.Chem.,2,2786 (2004)
2004KVa T Kirichenko,V Vetrogon,N Lukyanenko; Anal.Chim.Acta,505,277 (2004)
2004MFa P Marcos,S Felix,J Ascenso,M Segurado; New J.Chem.,28,748 (2004)
2004WTa Y Wu,M Tabata; J.Solution Chem.,33,777 (2004)
2004ZTa J Zolgharnein,H Tahmasebi,M Habibi; J.Incllusion Phenom.,49,231 (2004)
2003ADa F Arnaud-Neu,R Delgado,S Chaves; Pure & Appl.Chem.,75,71 (2003)
2003AGa P Agnihotri,B Ganguly,P Paul,P Ghosh; Indian J.Chem.,42A,2439 (2003)
2003CGa R Cusack,L Grondahl,D Fairlie,L Gahan; J.Inorg.Biochem.,97,191 (2003)
2003GHa J Geue,N Head,A Ward,S Lincoln; Aust.J.Chem.,56,917 (2003)
2003KUa Y Kudo,J Usami,S Katsuta,Y Takeda; Talanta,59,1213 (2003)
2003MGa E Malinowksa,L Gorski,D Wojciechowska; New J.Chem.,27,1440 (2003)
2003YVa M Yaftian,M Vahedpour,H Abdollahi; J.Inclusion Phenom.,47,129 (2003)
2002ASc M Ashram; J.Inclusion Phenom.,42,25 (2002)
2002CFb F Cecconi,C Frassineti,P Gans,A Sabatini; Polyhedron,21,1481 (2002)
2002GLb T Gunnlaugsson,J Leonard; J.Chem.Soc.,Perkin Trans.,II,1980 (2002)
2002GVc S Gromov,A Vedernikov,E Ushakov,U Edlund; Helv.Chim.Acta,85,60 (2002)
2002IIa K Ishimori,H Imura,K Ohashi; Anal.Chim.Acta,454,241 (2002)
2002KCa I Kolthoff,M Chantooni,A Jyo; Talanta,57,869 (2002)
2002KTa S Katsuta,H Tachibana,Y Takeda; J.Solution Chem.,31,499 (2002)
2002LAa I Leray,Z Asfari,J Vicens,B Valeur; J.Chem.Soc.,Perkin Trans.,II,1429 (2002)
2002MRd G Markl,J Reisinger,P Kreitmeier; Helv.Chim.Acta,85,1714 (2002)
2002MTb G McSkimming,J Tucker,J Desvergne; Chem.Eur.J.,8,3331 (2002)

2002NMa Y Nakatsuji,M Muraoka,H Kajiya,W Zhang; Bull.Chem.Soc.Jpn.,75,1765 (2002)
2002PLa K Popov,L Lajunen,A Popov et al; Inorg.Chem.Comm.,5,223 (2002)
2002THb Y Takeda,K Hashimoto,D Yoshiyama; J.Inclusion Phenom.,42,313 (2002)
2002TYa Y Takeda,A Yasui,M Morita,S Katsuta; Talanta,56,505 (2002)
2002YEa G Yapar,C Erk; J.Inclusion Phenom.,42,145 (2002)
2002YEb G Yapar,C Erk; J.Inclusion Phenom.,43,299 (2002)
2002YPc V Yam,Y Pui,K Cheung,N Zhu; New J.Chem.,26,536 (2002)
2002ZRa I Zaitseva,A Rudenko et al.; Zh.Fiz.Khim.,76,416 (2002)
2001AVa L Antonov,M Vladimirova,M Mitewa; J.Inclusion Phenom.,40,23 (2001)
2001BBa C Bazzicalupi,A Bencini,A Bianchi,F Pina; Inorg.Chem.,40,6172 (2001)
2001BCf H Buschmann,E Cleve,K Jansen,A Wego; J.Inclusion Phenom.,40,117 (2001)
2001BSa V Bhat,A Srivastava; J.Chem.Eng.Data,46,1215 (2001)
2001BSb K Brandt,P Seliger,A Grzejdziak; Inorg.Chem.,40,3704 (2001)
2001DXa N Dalley,G Xue,J Bradshaw,X Zhang; J.Heterocyclic Chem.,38,1 (2001)
2001INa H Inerowicz; J.Inclusion Phenom.,39,211 (2001)
2001JDa H-F Ji,R Dabestani,G Brown,R Hettich; J.Chem.Soc.,Perkin Trans.II,585 (2001)
2001KMb S Katsuta,T Motoyama,Y Takeda,M Ouchi; Bull.Chem.Soc.Jpn.,74,311 (2001)
2001LFa H-J Lu,Y-T Fan,Y-J Wu; Polyhedron,20,3281 (2001)
2001LWa L-D Li,Y Wei,A-J Tong; Anal.Chim.Acta,427,29 (2001)
2001MAa P Marcos,J Ascenso,M Segurado,J Pereira; Tetrahedron,57,6977 (2001)
2001OYa J Otsuki,T Yamagata,K Ohmuro,K Araki; Bull.Chem.Soc.Jpn.,74,333 (2001)
2001PCa S Pellet-Rostaing,F Chitry,M Lemaire; J.Chem.Soc.,Perkin Trans.II,1426 (2001)
2001SSa L Safonova,D Sakharov,L Shmukler; Phys.Chem.Chem.Phys.,3,819 (2001)
2001SSb K Sureshan,M Shashidhar,A Varma; J.Chem.Soc.,Perkin Trans.II,2298 (2001)
2001WBa J Weeks,M Buntine,S Lincoln; J.Chem.Soc.,Dalton Trans.,1939 (2001)
2001ZKb I Zaitseva,E Kabakova,N Bondarev; Zh.Fiz.Khim.,75,2142 (2001)
2000AAa F Arnaud-Neu,Z Asfari,B Souley; J.Chem.Soc.,Perkin Trans.II,495 (2000)
2000ABb F Arnaud-Neu,S Barbosa,A Casnati; New J.Chem.,24,967 (2000)
2000GDa L Goldenberg,N Denisov,J Biernat; J.Inclusion Phenom.,38,171 (2000)
2000ICa H Inerowicz,J Chojnacki,A Merz; J.Inclusion Phenom.,38,123 (2000)
2000KBb E Kempen,J Brodbelt; Anal.Chem.(USA),72,5411 (2000)
2000KSa Y Kikuchi,Y Sakamoto; Anal.Chim.Acta,403,325 (2000)
2000MTa L Manege,T Takayanagi,M Oshima; Analyst,125,699; 1928 (2000)
2000PBa L Prodi,F Bolletta,M Montalti,A Casnati; New J.Chem.,24,155 (2000)
2000TMb Y Takeda,Y Mochizuki,Y Matsuzaki; J.Inclusion Phenom.,37,179 (2000)
2000YYa S Yajima,T Yahata,Y Takeda; J.Inclusion Phenom.,38,305 (2000)
2000ZKb X Zhang,K Krakowiak,J Bradshaw,R Izatt; Ind.Eng.Chem.Res.,39,3516 (2000)
1999BHa H Buschmann,J Hermann,H Plenio; Chem.Eur.J.,5,2566 (1999)
1999CPa A Ceresa,E Pretsch; Anal.Chim.Acta,395,41 (1999)
1999DCa A Danil de Namor,E Castellano,L Salazar; Phys.Chem.Chem.Phys.,1,285 (1999)
1999DGa C de Stefano,A Gianguzza,D Piazzese; Anal.Chim.Acta,398,103 (1999)
1999DSd A D'Aprano,B Sesta,V Mauro,M Salomon; J.Inclusion Phenom.,35,451 (1999)
1999EDa S Eltsov,A Doroshenko,N Bondarev; Zh.Neorg.Khim.44,329 (1999)
1999ESa V Evreinov,Z Safronova,A Yarkevich et al; Zh.Obshch.Khim.,69,1088 (1999)
1999FKb S Filipek,M Kalinowski; J.Coord.Chem.,48,147 (1999)
1999JDa D Janecki,K Doktor,T Michalowski; Talanta,48,1191 (1999)

1999KCa I Kolthoff,M Chantooni,G Roland; J.Coord.Chem.,48,207 (1999)
1999KKb Y Kikuchi,M Kubota,K Sawada; Bull.Chem.Soc.Jpn.,72,2437 (1999)
1999LDa V Lamare,J-F Dozol,S Fuangswasdi; J.Chem.Soc.,Perkin Trans.II,271 (1999)
1999MAb P Marcos,J Ascenso,M Segurado,J Pereria; J.Phys.Org.Chem.,12,695 (1999)
1999MTd L Manege,T Takayanagi,M Oshima; Bull.Chem.Soc.Jpn.,72,1301 (1999)
1999OBa R Ostaszewski,A Bozek,M Palys; J.Chem.Soc.,Perkin Trans.II,1193 (1999)
1999OCa T Ojkova,C Christov,D Mihov; Monatsh.Chem.,130,1061 (1999)
1999RGa A Rouhollahi,M Ganjali,M Shamsipur; J Inclusion Phenom.,33.361 (1999)
1999RMb G Rounaghi,F Milani-Nejad,K Taheri; Indian J.Chem.,38A,568 (1999)
1999SBf N Su,J Bradshaw,X Zhang,P Savage; J.Org.Chem.,64,3825 (1999)
1999SBg N Su,J Bradshaw,X Zhang,H Song,P Savage; J.Org.Chem.,64,8855 (1999)
1999TEa V Tsvetkov,V Evreinov et al; Zh.Obshch.Khim.,69,1080 (1999)
1999TMa Y Takeda,Y Mochizuki,M Tanaka,Y Kudo; J.Inclusion Phenom.,33,217 (1999)
1999USa R Ungaro,M Schwing-Weill,G Wipff; J.Chem.Soc.,Perkin Trans.II,1727 (1999)
1999VMa P Victor,P Muhuri,B Das,D Hazra; J.Phys.Chem.B,103,11227 (1999)
1999WBa G Wenz,H-J Buschmann,E Schollmeyer; J.Coord.Chem.,48,465 (1999)
1999WKb E Wagner-Czauderna,M Kalinowski; J.Coord.Chem.,46,265 (1999)
1998BJb H-J Buschmann,K Jansen,C Meschke; J.Solution Chem., 27,135 (1998)
1998DBa D Dantz,H Buschmann,E Schollmeyer; Polyhedron,17,1891 (1998)
1998DDc P Delangle,J-P Dutasta,J-P Declercq; Chem.Eur.J.,4,100 (1998)
1998KBa E Kabakova,N Bondarev; Zh.Neorg.Khim.,43(5)820 (1998)
1998KBb E N Kabakova,N V Bondarev; Zh.Fiz.Khim.,72,1196 (1998)
1998KSb Y Kikuchi,Y Sakamoto; Anal.Chim.Acta,370,173 (1998)
1998KSc Y Kikuchi,Y Sakamoto,K Sawada; J.Chem.Soc.,Faraday Trans.,94,105 (1998)
1998KTb S Katsuta,C Takagi,Y Takeda; J.Chem.Soc.,Faraday Trans.,94,365 (1998)
1998MLa M Mimouni,R Lyazghi,J Juillard; New J.Chem.,367 (1998)
1998SBb V Solov'ev,V Baulin,A Varnek et al.; J.Chem.Soc.,Perkin Trans.II,1489 (1998)
1998SSf V Solov'ev,N Strakhova,V Kazachenko et; Eur.J.Org.Chem.,1379 (1998)
1998TIa T Takayanagi,T Iwashido,S Motomizu; Bull.Chem.Soc.Jpn.,71,1373 (1998)
1998TKa Y Takeda,A Kawarabayashi,K Endo; Anal.Sci.Jpn.,14,215 (1998)
1998WLc S Whitbread,S Lincoln,K Wainwright; J.Am.Chem.Soc.,120,2862 (1998)
1998ZBc X Zhang,J Bradshaw,A Bordunov,R Izatt; Inorg.Chim.Acta,278,6 (1998)
1997BGa P Beer,P Gale,Z Chen et al; Inorg.Chem.,36,5880 (1997)
1997BMa A Basili,P Mussini,T Mussini,S Rondinini; Ber.Buns.Phys.Chem.,101,842 (1997)
1997CHa S Capewell,G Hefter,P Sipos; J.Solution Chem., 26,957 (1997)
1997DMd R Dhillon,S Madbak,F Ciccone,S Lincoln; J.Am.Chem.Soc.,119,6126 (1997)
1997DZa A Danil de Namor,M Zapata-Ormachea; J.Phys.Chem.B,101,6772 (1997)
1997EKa S Eltsov,A Kern et al; Zh.Obshch.Khim.,67,1430 (1997)
1997EYa S Eltsov,S Yarmolenko et al; Zh.Neorg.Khim.,42,1217 (1997)
1997KKa K Kubo,N Kato,T Sakurai; Bull.Chem.Soc.Jpn.,70,3041 (1997)
1997LHa I Lednev,R Hester,J Moore; J.Chem.Soc.,Faraday Trans.,93,1551 (1997)
1997MKa V Mironov,V Kiselev et al; Zh.Neorg.Khim.,42,1029 (1997)
1997PBb Y Pointud,C Bernard,J Juillard; J.Solution Chem., 26,479 (1997)
1997STa A Saito,H Tomari,G Choppin; Inorg.Chim.Acta,258,145 (1997)
1997TAa K Tawarah,F Ababneh; J.Inclusion Phenom.,29,15 (1997)
1997WRa E Wagner-Czauderna,J Rzeszotarska; Ber.Buns.Phys.Chem.,101,1154 (1997)
1997WWa S Whitbread,J Weeks,S Lincoln; Australian J.Chem.,50,853 (1997)

1997YLa V W-H Yam,V W-M Lee,F Ke,K-W Siu; Inorg.Chem.,36,2124 (1997)
1997ZBa X Zhang,A Bordunov,X Kou et al; Inorg.Chem.,36,2586 (1997)
1997ZBb X Zhang,J Bradshaw,A Bordunov,R Izatt; J.Inclusion Phenom.,29,259 (1997)
1997ZIa X Zhang,R Izatt,K Krakowiak; Inorg.Chim.Acta,254,43 (1997)
1996AAb R Abidi,F Arnaud-Neu,M Drew,J Nelson; J.Chem.Soc.,Perkin Trans.II,2747 (1996)
1996AAc F Arnaud-Neu,R Arnecke,J Gordon; J.Chem.Soc.,Perkin Trans.II,1855 (1996)
1996AAe F Arnaud-Neu,Z Asfari,B Souley,J Vicens; New J.Chem.,20,453 (1996)
1996ABa R Abidi,M Baker,J Harrowfield; Inorg.Chim.Acta,246,275 (1996)
1996BBf A Bordunov,J Bradshaw et al; Inorg.Chem.,35,7229 (1996)
1996BCh H-J Buschmann,E Cleve,E Schollmeyer; J.Coord.Chem.,39,293 (1996)
1996CPa A Casnati,A Pochini,R Ungaro,D Reinhoudt; Chem.Eur.J.,2,436 (1996)
1996DBa Yu Didi, N Bondarev; Zh.Obshch.Khim.,66,1267 (1996)
1996DPc U Dash,M Patnaik; Indian J.Chem.,35A,836 (1996)
1996OKa K Ohtsu,T Kawashima,K Ozutsumi; Anal.Sci.,12,37 (1996)
1996RSb A de Robertis,C de Stefano,C Foti; Ann.Chim.(Rome),86,155 (1996)
1996RSc O Raevski,V Solov'ev et al.; J.Org.Chem.,61,8113 (1996)
1996SCa N Sabbatini,A Casnati,C Fischer; Inorg.Chim.Acta,252,19 (1996)
1996SDa A Stephens,R Dhillon et al; Inorg.Chem.,35,2019 (1996)
1996SSb V Solov'ev,N Strakhova,O Raevski et al.; J.Org.Chem.,61,5221 (1996)
1996WPa S Whitbread,S Politis,S Lincoln; J.Chem.Soc.,Dalton Trans.,1379 (1996)
1995ABc F Arnaud-Neu,G Barrett,S Fanni,D Marrs; J.Chem.Soc.,Perkin Trans.II,453 (1995)
1995BDa P Beer,M Drew,R Knubley et al; J.Chem.Soc.,Dalton Trans.,3117 (1995)
1995BSa I Batinic-Haberle,I Spasojevic et al; J.Chem.Soc.,Dalton Trans.,2503 (1995)
1995CUa A Casnati,R Ungaro,M Schwing,D Reinhoudt; J.Am.Chem.Soc.,117,2767 (1995)
1995DGa A Danil de Namor,E Gil,M Llosa Tanco; J.Phys.Chem.,99,16776 (1995)
1995DSb A D'Aprano,M Salomon,V Mauro; J.Solution Chem.,24,685 (1995)
1995FDa J Fransen,P Dutton; Can.J.Chem.,73,2217 (1995)
1995KTb Y Kudo,Y Takeda,H Matsuda; J.Electroanal.Chem.,396,333 (1995)
1995KZa K Krakowiak,X Zhang,J Bradshaw,R Izatt; J.Inclusion Phenom.,23,223 (1995)
1995OKb K Ohtsu,T Kawashima,K Ozutsumi; J.Chem.Soc.,Faraday Trans.,91,4375 (1995)
1995RGa A de Robertis,P di Giacomo,C Foti; Anal.Chim.Acta,300,45 (1995)
1995TEa E Tsvetkov,V Evreinov,V Baulin et al; Zh.Obshch.Khim.,65,1421(1300) (1995)
1995WIa P Wang,R Izatt,S Gillespie,J Oscarson; J.Chem.Soc.,Faraday Trans.,91,4207 (1995)
1995ZBa X Zhang,A Bordunov,J Bradshaw,R Izatt; J.Am.Chem.Soc.,117,11507 (1995)
1994BCd H Buschmann,E Cleve,E Schollmeyer; J.Solution Chem.,23,569 (1994)
1994BHb W Bakker,M Haas,C Khoo-Beattie et al; J.Am.Chem.Soc.,116,123 (1994)
1994CGa R Crossley,Z Goolamali,J Gosper et al; J.Chem.Soc.,Perkin Trans.II,513,1615 (1994)
1994DFc C de Stafano,C Foti,A Gianguzza; Talanta,41,1715 (1994)
1994FRa S Filipek,J Rzeszotarska,M Kalinowski; Monatsh.Chem.,125,801 (1994)
1994HKa R Hoffman,W Knoche,C Fenn,H-J Buschmann; J.Chem.Soc.,Faraday Trans.,90,1507 (1994)
1994HWc T Hu,L Weiler; Can.J.Chem.,72,1512 (1994)

1994IZa R Izatt,X Zhang,H An,C Zhu et al; Inorg.Chem.,33,1007 (1994)
1994LLa P Lye,G Lawrance,M Maeder et al; J.Chem.Soc.,Dalton Trans.,793 (1994)
1994OOa K Ozutsumi,K Ohtsin,T Kawashima; J.Chem.Soc.,Faraday Trans.,90,127 (1994)
1994OUa T Okada,T Usui; Anal.Chem.(USA),66,1654 (1994)
1994SFb C de Stefano,C Foti,A Gianguzza; J.Chem.Res.(S),464 (1994)
1994SSb A Srivastava,R Samant; J.Chem.Eng.Data,39,358 (1994)
1993ABb F Arnaud-Neu,G Barrett et al; Inorg.Chem.,32,2644 (1993)
1993BEb A Bovin,V Evreinov et al.; Izv.Akad.Nauk USSR,(5)952 (1993)
1993BMa G Barrett,A McKervey,J Malone et al; J.Chem.Soc.,Perkin Trans.II,1475 (1993)
1993CRa M Chen,R Reid; Can.J.Chem.,71,763 (1993)
1993DLb R Dhillon,S Lincoln; Australian J.Chem.,47,123 (1993)
1993EBa V Evreinov,V Baulin et al.; Izv.Akad.Nauk USSR,(3)518 (1993)
1993EVa V Evreinov,Z Vostroknutova et al; Zh.Neorg.Khim.,38(9),1519 (1993)
1993HSa R Helgeson,B Selle et al; J.Am.Chem.Soc.,115,11506 (1993)
1993ILa Y Inoue,Y Liu,L Tong,M Ouchi,T Hakushi; J.Chem.Soc.,Perkin Trans.II,1947 (1993)
1993INa Y Inoue,K Nakagawa,T Hakushi; J.Chem.Soc.,Dalton Trans.,1333,2279 (1993)
1993MAa S Manohar,G Atkinson; J.Solution Chem.,22,859 (1993)
1993RPa T Rodopoulos,P Pittet,S Lincoln; J.Chem.Soc.,Dalton Trans.,1055 (1993)
1993SFb A Stephens,S Lincoln; J.Chem.Soc.,Dalton Trans.,2123 (1993)
1993SKf G Smith,H Kirschenlohr,J Metcalfe; J.Chem.Soc.,Perkin Trans.II,1205 (1993)
1993TAa L Tassi; J.Chem.Soc.,Faraday Trans.,89,733 (1993)
1993TCa M Turonek,P Clarke et al; Inorg.Chem.,32,2195 (1993)
1992ABb F Arnaud-Neu,G Barrett,S Cremin,M Deasy; J.Chem.Soc.,Perkin Trans.II,1119 (1992)
1992BCa H Buschmann,E Cleve,E Schollmeyer; Inorg.Chim.Acta,193,93 (1992)
1992BCe P Bosseray,G Coudert,J Juillard; Can.J.Chem.,70,828 (1992)
1992BEa V Baulin,V Evreinov et al.; Izv.Akad.Nauk USSR,(5)1161 (1992)
1992BUb H Buschmann; Inorg.Chim.Acta,195,51 (1992)
1992BVa J Benko,O Vollarova; Coll.Czech.Chem.Comm.,57,2227 (1992)
1992CDc R Cacciapaglia,A Doorn et al; J.Am.Chem.Soc.,114,2611 (1992)
1992CGb P Clarke,J Gulbis,S Lincoln et al; Inorg.Chem.,31,3398 (1992)
1992CLb A Cygan,E Luboch,J Biernat; J.Coord.Chem.,27,87 (1992)
1992CRa A Casale,A de Robertis,F Licastro; Ann.Chim.(Rome),82,13 (1992)
1992CSc Z Chen,O Schall et al; J.Am.Chem.Soc.,114,444 (1992)
1992DDb A De Robertis,C De Stefano,C Rigano; Thermochim.Acta,202,133 (1992)
1992DJa N Dalley,W Jiang,G Wu,J Bradshaw,R Izatt; J.Inclusion Phenom.,12,333 (1992)
1992HGb O Heitzsch,K Gloe,A Sabela,J Koryta; J.Inclusion Phenom.,13,311 (1992)
1992LPb R Lyazghi,Y Pointud,J Juillard; J.Chem.Soc.,Faraday Trans.,88,1017 (1992)
1992LSc S Lincoln,A Stephens; Inorg.Chem.,31,5067 (1992)
1992MGa J Medina,T Goodnow et al; J.Am.Chem.Soc.,114,10583 (1992)
1992MSe D Mishra,U Sharma,V Bhagwat; J.Indian Chem.Soc.,69,70 (1992)
1992OIa K Ozutsumi,S Ishiguro; Bull.Chem.Soc.Jpn.65,1173 (1992)
1992PSa H Parham,M Shamsipur; Polyhedron,11,987 (1992)
1992PTa M Payne,M Truter; J.Inclusion Phenom.,12,361 (1992)

1992TFa Y Takeda,I Fujimaki,S Ochiai,K Aoki; J.Inclusion Phenom.,13,129 (1992)
1992TSb Y Takeda,H Sato,S Sato; J.Solution Chem.,21,1069 (1992)
1992VOa V Vasil'ev,T Orlova,N Goncharova; Zh.Neorg.Khim.,37,2088 (1080) (1992)
1991ACc F Arnaud-Neu,S Cremin,D Cunningham; J.Inclusion Phenom.,10,329 (1991)
1991ASb M Amini,M Shamsipur; Inorg.Chim.Acta,183,65 (1991)
1991BMb M Bruening,D Mitchell et al; Anal.Chem.(USA),21 (1991)
1991BSa H Bieth,G Schlewer,B Spiess; J.Inorg.Biochem.,41,37 (1991)
1991BUa H Bukowsky,E Uhlemann,K Gloe,P Muhl; Polyhedron,10,1591 (1991)
1991CMb E Clarke,A Martell; Inorg.Chim.Acta,190,27,37 (1991)
1991DDa P Daniele,A de Robertis,C de Stefano +; J.Solution Chem.,20,495 (1991)
1991EBa V Evreinov,V Baulin et al.; Izv.Akad.Nauk USSR,(9)1993 (1991)
1991ERa C Erk; Thermochim.Acta,180,317 (1991)
1991FGb F Fronczek,R Gandour,T Fyles; Can.J.Chem.,69,12 (1991)
1991GTa B Grabaric,M Tkalcec,V Merzel; Electroanalysis,3,647 (1991)
1991HHb R Hedderwick,F Hibbert et al; J.Chem.Soc.,Perkin Trans.II,579 (1991)
1991IOa Y Inoue,M Ouchi,K Hosoyama et al; J.Chem.Soc.,Dalton Trans.,1291 (1991)
1991LMc C Lhermet,J-P Morel,L Angley; Electroanalysis,3,677 (1991)
1991LSb S Lincoln,A Stephens; Inorg.Chem.,30,3529 (1991)
1991NTa S Norov,A Tsivadze et al; Zh.Neorg.Khim.,36,(2)433 (1991)
1991RSa A Robertis,C de Stefano,C Forti, Cuffari; J.Chem.Res.(S),264 (1991)
1991SBa Y Salnikov,G Boos et al; Zh.Neorg.Khim.,36,1308 (745) (1991)
1991SGa V Solovev,L Govorkova et al.; Izv.Akad.Nauk USSR,(3)575 (1991)
1991SMa R Smith,A Martell,Y Chen; Pure & Appl.Chem.,63,1015 (1991)
1991TKa Y Takeda,T Kimura; J.Inclusion Phenom.,11,159 (1991)
1991TNa N Truong,A Norris,H Shin,E Buncel; Inorg.Chim.Acta,184,59 (1991)
1990AFa A Anantanarayan,T Fyles; Can.J.Chem.,68,1338 (1990)
1990CDc R Curini,G D'Ascenzo,A De Robertis; Thermochim.Acta,173,25 (1990)
1990DDb P Daniele,A de Robertis,C de Stafano; Ann.Chim.(Rome),80,177 (1990)
1990DSa R Delgado,L Siegfried et al; Helv.Chim.Acta,73,140 (1990)
1990EAb V Evreinov,A Antoshin et al.; Izv.Akad.Nauk USSR,(4)873 (1990)
1990KMb R Kataky,K Matthes et al; J.Chem.Soc.,Perkin Trans.II,1425 (1990)
1990LNa N Lukyanenko,N Nazarova,V Vetrogon et al; Polyhedron,9,1369 (1990)
1990LUa E Lada,A Urbanczyk,M Kalinowski; Australian J.Chem.,43,2003 (1990)
1990MBb A Majmudar,K Bhalla,A Gupta; Indian J.Chem.,29A,639 (1990)
1990RAa L Rowe,G Atkinson; J.Solution Chem.,19,149 (1990)
1990SAb M Salomon; J.Solution Chem.,19,1225 (1990)
1990SPa Z Samec,P Papoff; Anal.Chem.(USA),62,1010 (1990)
1990TAa Y Takeda; J.Inclusion Phenom.,9,309 (1990)
1989ABb A Albrecht,S Blanc,D Boyd,G Jeminet; J.Am.Chem.Soc.,111,8598 (1989)
1989ACb F Arnaud-Neu,E Collins,M Deasy et al; J.Am.Chem.Soc.,111,8681 (1989)
1989BBh G Bonas,C Bosso,M Vignon; J.Inclusion Phenom.,7,637 (1989)
1989BEa A Bovin,V Evreinov et al; Izv.Akad.Nauk(USSR),11,2611 (1989)
1989CMb J Charlier,E Merciny; Anal.Chim.Acta,220,187 (1989)
1989EVa I Evreinov,Z Vostroknutova et al; Izv.Akad.Nauk(USSR),1,60 (1989)
1989GSc M Geringer,H Sterk; Magn.Res.Chem.,27,1148 (1989)
1989KSa T Kron,E Sinyavskaya,E Tsvetkov; Izv.Akad.Nauk(USSR),11,2451 (1989)
1989MGa I Marolleau,J-P Gisselbrecht et al; J.Chem.Soc.,Dalton Trans.,367 (1989)
1989MGb M Mpassi,G Guillaumet,G Condet et al; Can.J.Chem.,67,1132 (1989)
1989SSd N Strakhova,V Solovev,O Raevskii; Koord.Khim.,15(4)483 (1989)
1989TKa Y Takeda,R Kohno,Y Kudo,N Fukada; Bull.Chem.Soc.Jpn.,62,999 (1989)

1989TKb E Tsvetkov,T Kron,E Sinyavskaya; Izv.Akad.Nauk(USSR),11,2456 (1989)
1989TKc Y Takeda,T Kimura,Y Kudo,H Matsuda; Bull.Chem.Soc.Jpn.,62,2885 (1989)
1989YOa H Yokoyama,T Ohta; Bull.Chem.Soc.Jpn.,62,345 (1989)
1988ADa M Amorim,R Delgado et al; Talanta,35,741 (1988)
1988AGa A Arduini,E Ghidini,R Ungaro,F Ugozzoli; J.Inclusion Phenom.,6,119 (1988)
1988BUa H-J Buschmann; Polyhedron,7,721 (1988)
1988BUb H-J Buschmann; Thermochim.Acta,17,277 (1988)
1988DSa A Danil de Namor,F Salazar; J.Chem.Soc.,Faraday Trans.I,84,3539 (1988)
1988DSb A D'Aprano,B Sesta; J.Solution Chem.,17,117 (1988)
1988HHb S Hassan,M Hamada; Talanta,35,361 (1988)
1988HKa G-X He,K Kikukawa,T Ikeda et al; J.Chem.Soc.,Perkin Trans.II,719 (1988)
1988MOc Y Matsushima,A Okuwaki; Bull.Chem.Soc.Jpn.,61,3344 (1988)
1988NHa T Nakamura,H Higuchi,K Izutsu; Bull.Chem.Soc.Jpn.,61,1020 (1988)
1988PJa Y Pointud,J Juillard; J.Chem.Soc.,Faraday Trans.I,84,959 (1988)
1988SSc V Solovev,N Strakhova,O Raevskii; Izv.Akad.Nauk(USSR),10,2400 (1988)
1988TKa Y Takeda,K Katsuta,Y Inoue et al; Bull.Chem.Soc.Jpn.,61,627 (1988)
1988TKb Y Takeda,T Kumazawa; Bull.Chem.Soc.Jpn.,61,655 (1988)
1988TMb K Tawarah,S Mizyed; J.Inclusion Phenom.,6,583 (1988)
1988TMc K Tawarah,S Mizyed; J.Inclusion Phenom.,6,555 (1988)
1988YKa K Yatsimirskii,M Kabachnik et al; Izv.Akad.Nauk(USSR),1,53 (1988)
1988YOa H Yokoyama,T Ohta; Bull.Chem.Soc.Jpn.,61,3073 (1988)
1987BBf R Bartsch,D Babb,B Knudsen; J.Inclusion Phenom.,5,515 (1987)
1987BUb H-J Buschmann; Inorg.Chim.Acta,134,225 (1987)
1987CCc B Czech,A Czech,B Knudsen et al; Gazz.Chim.Ital.,117,717 (1987)
1987DDa J Desroches,H Dugas,T Fyles,G Robertson; Can.J.Chem.,65,1513 (1987)
1987DDb R Delgado,J da Silva et al; Polyhedron,6,29 (1987)
1987DDd A De Robertis,C De Stefano,S Sammartano; Talanta,34,933 (1987)
1987DSa A Danil de Namor,S Salazar et al; J.Chem.Soc.,Faraday Trans.I,83,2663 (1987)
1987KHa K Kikukawa,G-X He,A Abe,T Goto et al; J.Chem.Soc.,Perkin Trans.II,135 (1987)
1987MGb A Majmudar,A Gupta; Indian J.Chem.,26A,721 (1987)
1987MKb T Matkovskaya,L Krinitskaya,N Dyatlova; Reaktivy i Osobo Chistye Veshch.,49,83 (1987)
1987SRb H Stover,M Robillard,C Detellier; Polyhedron,6,577 (1987)
1987TCa V Tkachev,A Chaikovskaya et al; Izv.Akad.Nauk(USSR),12,2745 (1987)
1987ZBa P Zanonato,P di Bernardo et al; Polyhedron,6,417 (1987)
1987ZBb D Zollinger,E Bulten,A Christenhusz; Anal.Chim.Acta,198,207 (1987)
1986BUb H-J Buschmann; Inorg.Chim.Acta,120,125 (1986)
1986BUd H-J Buschmann; Inorg.Chim.Acta,125,31 (1986)
1986CDc S Capone,A De Robertis,S Sammartano; Thermochim.Acta,102,1 (1986)
1986CHc D Cram,S Ho; J.Am.Chem.Soc.,108,2998 (1986)
1986DGa A Danil de Namor,L Ghousseini,T Hill; J.Chem.Soc.,Faraday Trans.I,82,349 (1986)
1986GSa M Gholivand,M Shamsipur; Inorg.Chim.Acta,121,53 (1986)
1986HAa G-X He,A Abe,T Ikeda,F Wada et al; Bull.Chem.Soc.Jpn.,59,674 (1986)
1986ICa R Izatt,G Clark,J Lamb,J Christensen; Thermochim.Acta,97,115 (1986)
1986LWa Liu Y,Wang Y K,Guo Z Q,Yang S Y,Jin; Acta Chimica Sinica,22 (1986)
1986RSa A de Robertis,C de Stefano et al; J.Chem.Res.(S),164 (1986)

1986SDa P Singh,H Dahiya,V Sharma; Indian J.Chem.,25A,116 (1986)
1986STb E Sinyavskaya,L Tsymbal et al; Izv.Akad.Nauk(USSR),1,176 (1986)
1985AEb R Adamic,E Eyring,S Petrucci,R Bartsch; J.Phys.Chem.,89,3752 (1985)
1985CDb A Casale,A De Robertis,S Sammartano; Thermochim.Acta,95,15 (1985)
1985CKa M Chantooni,I Kolthoff; J.Solution Chem.,14,1 (1985)
1985DGa A Danil de Namor,L Ghousseini; J.Chem.Soc.,Faraday Trans.I,81,781 (1985)
1985DGb A Danil de Namor,L Ghousseini et al; J.Chem.Soc.,Faraday Trans.I,81,2459 (1985)
1985DRa P Daniele,A de Robertis et al; J.Chem.Soc.,Dalton Trans.,2353 (1985)
1985DRb P Daniele,C Rigano,S Sammartano; Anal.Chem.(USA),57,2956 (1985)
1985DSa P Daniele,S Sonego,M Ronzani et al; Ann.Chim.(Rome),75,245 (1985)
1985HAd L Harju; Finn.Chem.Lett.235 (1985)
1985LWa Y Liu,Y Wang,Z Guo,S Yang etc; Huaxue Tongbao(Chem.China),5 (1985)
1985RCa J Rebek,T Costello,L Marshall et al; J.Am.Chem.Soc.,107,7481 (1985)
1985RSa A de Robertis,C de Stefano,C Rigano +; J.Chem.Res.(S),42 (1985)
1985TAa Y Takeda,O Arima; Bull.Chem.Soc.Jpn.,58,3403 (1985)
1985YIa M Yamauchi,T Imato,M Katahiri; Anal.Chim.Acta,169,59 (1985)
1985YKa K Yatsimirskii,M Kabachnik et al; Zh.Neorg.Khim.,30,976(549) (1985)
1985ZFa Zhou Yiquan,H Fang,D Wang,J Zhang; Acta Chimica Sinica,290 (1985)
1984AMa E Arnett,S Maroldo et al; J.Am.Chem.Soc.,106,6759 (1984)
1984BPa B Bubnis,G Pacey; Talanta,31,1149 (1984)
1984CTa B Cox,N Truong,J Rzeszotarska et al; J.Chem.Soc.,Faraday Trans.I,80,3275 (1984)
1984CTb B Cox,Ng van Truong et al; J.Am.Chem.Soc.,106,5965 (1984)
1984CTd C Chan,N Tioh,G Hefter; Polyhedron,3,845 (1984)
1984DGa A Danil de Namor,L Ghousseini; J.Chem.Soc.,Faraday Trans.I,80,2349 (1984)
1984DRa A De Robertis,C Rigano,S Sammartano; Ann.Chim.(Rome),74,33 (1984)
1984DSa G Dezhkina,I Shmydko,V Fedorov; Zh.Neorg.Khim.,29,1603 (1984)
1984FWa T Fyles,D Whitfield; Can.J.Chem.62,507 (1984)
1984IEa I Ikeda,H Emura,M Okahara; Bull.Chem.Soc.Jpn.,57,1612 (1984)
1984MFa E Merciny,J Fuger; Anal.Chim.Acta,160,87 (1984)
1984MPa T Myasoedova,A Ponomareva et al; Zh.Neorg.Khim.,29,1938(1109) (1984)
1984NMb Y Nakatsuji,T Mori,M Okahara; J.Chem.Soc.,Chem.Comm.,1045 (1984)
1984STb F Stover; J.Chromatography,298,203 (1984)
1984YKa K Yatsimirskii,M Kabachnik et al; Zh.Neorg.Khim.,29,884(510) (1984)
1983AAa E Amble,E Amble; Polyhedron,2,1063 (1983)
1983CRb C Chang,M Rowland; Inorg.Chem.,22,3867 (1983)
1983DGa P Daniele,M Grasso,C Rigano et al; Ann.Chim.(Rome),73,495 (1983)
1983DRb P Daniele,C Rigano,S Sammartano; Thermochim.Acta,62,101 (1983)
1983GGa W Gokel,D Goli,C Minganti,L Echegoyen; J.Am.Chem.Soc.,105,6786 (1983)
1983IKa I Ikeda,T Katayama,K Tsuchiya et al; Bull.Chem.Soc.Jpn.,56,2473 (1983)
1983KOa J Kim,M Ozeki,J Komiyama,T Iijima; J.Chem.Soc.,Faraday Trans.I,79,2153 (1983)
1983KTa K Kobiro,Y Tanaka,K Okubo et al; Chem.Lett.,1507 (1983)
1983LSa Luo Qinhui,Shen Mengchang; Acta Chimica Sinica,871 (1983)
1983MKa A Masuyama,P L-Kuo,M Okahara; Nippon Kagaku Kaishi,249 (1983)
1983RCb G Roland,M Chantooni,I Kolthoff; J.Chem.Eng.Data,28,162 (1983)
1983SLa Sheng Huaiyu,S Li,H Lu,D Cheng; Acta Chimica Sinica,1127 (1983)
1982BDc J Bolte,C Demuynck,G Jeminet; Can.J.Chem.,60,981 (1982)

1982BLc J-P Behr,J-M Lehn,P Vierling; Helv.Chim.Acta,65,1853 (1982)
1982CCb R Contant,J Ciabrini; J.Chem.Res.(S),50 (1982)
1982CFb B Cox,P Firman,D Gudlin et al; J.Phys.Chem.,86,4988 (1982)
1982DNa A Delannoy,J Nicole et al; Anal.Chim.Acta,134,341 (1982)
1982DRa P Daniele,C Rigano,S Sammartano; Transition Met.Chem.,7,109 (1982)
1982DRb P Daniele,C Rigano,S Sammartano; Inorg.Chim.Acta,63,267 (1982)
1982DSa R Delgado,J da Silva; Talanta,29,815 (1982)
1982GBa E Grunwald,C Brown; J.Phys.Chem.,86,182 (1982)
1982GCa D Gill,J Cheema; Electrochim.Acta,27,755 (1982)
1982GCb D Gill,J Cheema; Electrochim.Acta,27,1267 (1982)
1982GKc E Graf,J-P Kintzinger,J-M Lehn; J.Am.Chem.Soc.,104,1672 (1982)
1982GRc P Georgiou,Richardson,Truter,J Wingfield; Inorg.Chim.Acta,66,1 (1982)
1982HLa B Haymore,J Lamb,R Izatt et al; Inorg.Chem.,21,1598 (1982)
1982HLc T Handyside,J Lockhart,M McDonnell,P Rao; J.Chem.Soc.,Dalton Trans.,2331 (1982)
1982MKa K Matsushima,N Kawamura et al; Bull.Chem.Soc.Jpn.,55,2181 (1982)
1982MPe L Malahias,O Popovych; J.Chem.Eng.Data,27,105 (1982)
1982MRa G Michaux,J Reisse; J.Am.Chem.Soc.,104,6895 (1982)
1982MYc T Miyazaki,S Yanagida et al; Bull.Chem.Soc.Jpn.,55,2005 (1982)
1982SYa T Sugawara,M Yudasaka Y Yokoyama et al; J.Phys.Chem.,86,2705 (1982)
1982TAa Y Takeda; Bull.Chem.Soc.Jpn.,55,2040 (1982)
1982YSa K Yatsimirskii,E Synyavskaya et al; Zh.Neorg.Khim.,27,1148(644) (1982)
1981BBb J Bradshaw,S Baxter,I Lamb et al; J.Am.Chem.Soc.,103,1821 (1981)
1981BEb T Bell; J.Am.Chem.Soc.,103,1163 (1981)
1981CMd R Cali,S Musumeci,S Sammartano; Inorg.Chim.Acta,56,L11 (1981)
1981CRa B Cox,J G-Rosas,H Schneider; J.Am.Chem.Soc.,103,1384 (1981)
1981DRa P Daniele,C Rigano,S Sammartano; Thermochim.Acta,46,103 (1981)
1981EMb G Ercolani,L Mandolini,B Masci; J.Am.Chem.Soc.,103,7484 (1981)
1981GLa E Graf,J Lehn; Helv.Chim.Acta,64,1040 (1981)
1981KMb S Kulstad,L Malmsten; J.Inorg.Nucl.Chem.,43,1299 (1981)
1981PTa D Parsons,M Truter,J Wingfield; Inorg.Chim.Acta,47,81 (1981)
1981PTb D Parsons,M Truter,J Wingfield; Inorg.Chim.Acta,51,93 (1981)
1981SKd E Sinyavskaya,M Konstantinovskaya et al; Zh.Neorg.Khim.,26,1800(971) (1981)
1981SPb E Sinyavskaya,S Pisareva et al; Zh.Neorg.Khim.,26,1274(686) (1981)
1981SSd R Sinta,J Smid; J.Am.Chem.Soc.,103,6962 (1981)
1981TMb C Tang,J McLean jnr; Inorg.Chem.,20,2652 (1981)
1980BMa J Bradshaw,G Maas,J Lamb et al; J.Am.Chem.Soc.,102,467 (1980)
1980CKa B Cox,D Knop,H Schneider; J.Phys.Chem.,84,320 (1980)
1980CRa R Cox,J G-Rosas,H Schneider; J.Phys.Chem.,84,3178 (1980)
1980DRa P Daniele,C Rigano,S Sammartano; Ann.Chim.(Rome),70,119 (1980)
1980FSb V Fedorov,I Shmydko,G Dezhina; Koord.Khim.,6,983 (1980)
1980GAb T Gilligan,G Atkinson; J.Phys.Chem.,84,208 (1980)
1980GBa R Gresser,D Boyd,A A-Gary et al; J.Am.Chem.Soc.,102,651 (1980)
1980HNa H Hopkins,A Norman; J.Phys.Chem.,84,309 (1980)
1980KKb M Kodama,E Kimura,S Yamaguchi; J.Chem.Soc.,Dalton Trans.,2536 (1980)
1980KMb S Kulstad andL Malmsten; J.Inorg.Nucl.Chem.,42,573 (1980)
1980LDa L Lugina,N Davidenko; Zh.Neorg.Khim.,25,1454 (1980)
1980LIa J Lamb,R Izatt,C Swain et al; J.Am.Chem.Soc.,102,475 (1980)
1980LIb J Lamb,R Izatt,C Swain et al; J.Am.Chem.Soc.,102,479 (1980)

1980LVb J Lehn,P Vierling; Tetrahedron Lett.,21,1323 (1980)
1980MDa J Massaux,J Desreux,G Duyckaerts; J.Chem.Soc.,Dalton Trans.,865 (1980)
1980NTa H Nakamura,M Takagi,K Ueno; Anal.Chem.(USA),52,1668 (1980)
1980OPa C Olliff,G Pickering,K Rutt; J.Inorg.Nucl.Chem.,42,1201 (1980)
1980TYa Y Takeda,H Yano,M Ishibashi et al; Bull.Chem.Soc.Jpn.,53,72 (1980)
1980TYb Y Takeda,H Yano; Bull.Chem.Soc.Jpn.,53,1720 (1980)
1980WAa J Wingfield; Inorg.Chim.Acta,45,L157 (1980)
1980WJa Wang Genglin,Jiang Zonghui; Chem.J.of Chin.Univ.,117 (1980)
1980WSb L Wong,J Smid; Polymer,21,195 (1980)
1979BDa L T-Bozic,P Danesi; J.Inorg.Nucl.Chem.,41,833 (1979)
1979BLb J Bessiere,M Lejaille; Anal.Lett.,12,753 (1979)
1979DHa A Delannoy,J Hennion,J-C Bavay,J Nicole; Compt.Rend.,289C,401 (1979)
1979HRa H Hoiland,J Ringseth,T Brun; J.Solution Chem.,8,779 (1979)
1979JLa C Jollcoeur,L Lendin,R Labalne; J.Phys.Chem.,83,2806 (1979)
1979KLa K Koenig,G Lein,P Stucker et al; J.Am.Chem.Soc.,101,3553 (1979)
1979KMb K Kimura,T Maeda,T Shono; Talanta,26,945 (1979)
1979LPf P LaBrocca,R Phillips,O Popovych; J.Chem.Eng.Data,24,215 (1979)
1979MMa B Martin,D Martin; J.Inorg.Nucl.Chem.,41,1503 (1979)
1979PSa N Poonia,S Sarad,A Jayakumar et al; J.Inorg.Nucl.Chem.,41,1759 (1979)
1979TNa B Tomazik,G Nancollas; J.Crystal Growth,46,355 (1979)
1978CAa P Carman; J.Solution Chem.,7,845 (1978)
1978CSb B Cox,H Schneider,J Stroka; J.Am.Chem.Soc.,100,4746 (1978)
1978FFa F Fisher,A Fox; J.Solution Chem.,7,561 (1978)
1978HKc A Hofmanova,J Koryta,L Mittal et al; Inorg.Chim.Acta,28,73 (1978)
1978HPa J Hooderheide,A Popov; J.Solution Chem.,7,357 (1978)
1978JId M Jawaid,F Ingman; Talanta,25,91 (1978)
1978LMa J Lehn,F Montavon; Helv.Chim.Acta,61,67 (1978)
1978PAa D Parsons; J.Chem.Soc.,Perkin Trans.I,451 (1978)
1978SKc L Smirnova,V Kravtsov et al; Elektrokhim.,14,290 (1978)
1978WVa N Wester,F Vogtle; J.Chem.Res.(S),400 (1978)
1978YSa K Yatsimirskii,E Sinyavskaya,T Kudrya; Dokl.Akad.Nauk SSSR 240,100 (1978)
1978YTa E Yee,J Tabib,M Weaver; J.Electroanal.Chem.,96,241 (1978)
1977ADa M Abraham,A Danil de Namor,W Lee; J.Chem.Soc.,Chem.Comm.,893 (1977)
1977CEb P Chock,F Eggers,M Eigen,R Winkler; Biophys.Chem.,6,239 (1977)
1977FFa F Fisher,A Fox; J.Solution Chem.,6,641 (1977)
1977ILa R Izatt,J Lamb,G Maas et al; J.Am.Chem.Soc.,99,2365 (1977)
1977ILc R Izatt,J Lamb,R Asay et al; J.Am.Chem.Soc.,99,6134 (1977)
1977LSc J Lehn,J Simon; Helv.Chim.Acta,60,141 (1977)
1977MTc S Moore,T Tarnowski,M Newcomb,D Cram; J.Am.Chem.Soc.,99,6398 (1977)
1977RLa J Rodriguez,G Liesegang; J.Phys.Chem.,81,2118 (1977)
1977SZa C Srivanavit,J Zink,J Dechter; J.Am.Chem.Soc.,99,5876 (1977)
1977TMa B Tummler,G Maas,E Weber et al; J.Am.Chem.Soc.,99,4683 (1977)
1976AFa A Alegria,F Fontanez,G Stevenson; J.Phys.Chem.,80,1113 (1976)
1976ANb G Anderegg; Z.Naturforsch.31B,786 (1976)
1976BLb J-P Behr,J-M Lehn,P Vierling; J.Chem.Soc.,Chem.Comm.,621 (1976)
1976DCa P Danesi,R Chiarizia,C Fabiani et al; J.Inorg.Nucl.Chem.,38,1226 (1976)
1976FAa l Favretto; Ann.Chim.(Rome),66,621 (1976)
1976FGb H Flora,W Gilkerson; J.Phys.Chem.,80,679 (1976)
1976ITa R Izatt,R Terry,D Nelson et al; J.Am.Chem.Soc.,98,7626 (1976)

1976ITb R Izatt,R Terry,B Haymore et al; J.Am.Chem.Soc.,98,7620 (1976)
1976KLc E Kauffmann,J Lehn,J Sauvage; Helv.Chim.Acta,59,1099 (1976)
1976KOb G Kura,S Ohashi; J.Inorg.Nucl.Chem.,38,1151 (1976)
1976KRb R Kobos,G Rechnitz; Arch.Biochem.Biophys.,175,11 (1976)
1976LCa D Live,S Chan; J.Am.Chem.Soc.,98,3769 (1976)
1976LFa G Liesegang,M Farrow et al; J.Am.Chem.Soc.,98,6905 (1976)
1976LLa R Lemir,M Lister; J.Solution Chem.,5,171 (1976)
1976RMa J Rosenfaub M Martin C Prakash et al; J.Solution Chem.,5,311 (1976)
1976RMb J Rosenfaub M Martin C Prakash et al; J.Solution Chem.,5,345 (1976)
1976SCa G Stevenson,R Concepcion,I Ocasio; J.Phys.Chem.,80,861 (1976)
1976UHa R Ungaro,B E-Haj,J Smid; J.Am.Chem.Soc.,98,5198 (1976)
1975AJa C Atlani,J-C Justice; J.Solution Chem.,4,955 (1975)
1975ANa G Anderegg; Helv.Chim.Acta,58,1218 (1975)
1975CJa G Chaput,G Jeminet,J Juillard; Can.J.Chem.,53,2240 (1975)
1975DBb S Davidova,V Barabanov et al; Izv.Akad.Nauk(USSR),6,1441 (1975)
1975EWa B Elgquist, M Wedborg; Marine Chem.,3,215 (1975)
1975HBb P Hemery S Boileau P Sigwalt et al; J.Polymer Sci.(part B),13,49 (1975)
1975KIc L Kourbatova,A Ivakin,E Voronova; Koord.Khim.,1,1481 (1975)
1975LSc J Lehn,J Sauvage; J.Am.Chem.Soc.,97,6700 (1975)
1975MMa B Martin,D Martin; J.Inorg.Nucl.Chem.,37,1079 (1975)
1975SAd G Stevenson,A Alegria; J.Am.Chem.Soc.,97,3869 (1975)
1975SIc A Sadakane,T Iwachido,K Toei; Bull.Chem.Soc.Jpn.,48,60 (1975)
1975SMa R Smied; J.Inorg.Nucl.Chem.,37,318 (1975)
1975SNa E Shchori,N Nae,J Jagur-Grodzinski; J.Chem.Soc.,Dalton Trans.2381 (1975)
1975YKa H Yeager,B Kratochvil; Can.J.Chem.,53,3448 (1975)
1974ADb A D'Aprano,I Donato,E Caponetti; J.Solution Chem.,3,363; 3,371 (1974)
1974ARa R Aruga; J.Inorg.Nucl.Chem.,36,3779 (1974)
1974DKb A Das,K Kundu; J.Chem.Soc.,Faraday Trans.I,70,1452 (1974)
1974ESa J Exner,E Steiner; J.Am.Chem.Soc.,96,1782 (1974)
1974FIb F Ferranti,A Indelli; J.Solution Chem.,3,619 (1974)
1974HIa G Hanania,S Israelian; J.Solution Chem.,3,57 (1974)
1974HPb E Hanna,A Pethybridge,J Prue,D Spiers; J.Solution Chem.,3,563 (1974)
1974KKc A Kreshkov,K Komarova,V Gorbashev; Elektrokhim.,10,1082(E:1025) (1974)
1974RKd T Ryan,J Koryta,A Matejkova et al; Anal.Lett.,7,335 (1974)
1974SKa A Shkodin,T Kurova; Elektrokhim.,10,340(E:323) (1974)
1973BMd P Bruno,M Monica,E Righetti; J.Phys.Chem.,77,1258 (1973)
1973CSa J Carr,D Swartzfager; J.Am.Chem.Soc.,95,3569 (1973)
1973DDa A D'Aprano,I Donato; J.Chem.Soc.,Faraday Trans.I,69,1685 (1973)
1973FGa H Flora,W Gilkerson; J.Phys.Chem.,77,1421 (1973)
1973GKb E Grimsrud,B Kratochvil; J.Am.Chem.Soc.,95,4477 (1973)
1973JYa M Jansen,H Yeager; J.Phys.Chem.,77,3089 (1973)
1973KCb I Kolthoff,M Chantooni; J.Phys.Chem.,77,523 (1973)
1973SOb A Solovkin; Zh.Strukt.Khim.,14,921(E:860) (1973)
1973TKb S Takezawa,Y Kondo,N Tokura; J.Phys.Chem.,77,2133 (1973)
1973VAa V Vasilev,S Aleksandrova; Zh.Neorg.Khim.,18,2055(E:1089) (1973)
1973YKa N Yui,Y Kurokawa,M Nakayama; Bull.Chem.Soc.Jpn.,46,1027 (1973)
1973ZFa C Zust,P Fruh,W Simon; Helv.Chim.Acta,56,495 (1973)
1972COa E Constantinescu; Rev.Roumaine Chim.,17,1819 (1972)
1972DAa A D'Aprano; J.Phys.Chem.,76,2920 (1972)
1972DDa A D'Aprano,I Donato; Electrochim.Acta,17,1175 (1972)

1972DDb A D'Aprano,I Donato; Gazz.Chim.Ital.,102,923 (1972)
1972DMc H Dunsmore,D Midgley; J.Chem.Soc.,Dalton Trans.,64 (1972)
1972FEb T Funck,F Eggers,E Grell; Chimia,26,637 (1972)
1972IWa U Isacsson,G Wikander; Acta Chem.Scand.,26,1623 (1972)
1972IWb T Iwachido; Bull.Chem.Soc.Jpn.,45,1746 (1972)
1972IWc T Iwachido; Bull.Chem.Soc.Jpn.,45,432 (1972)
1972KRb K Kundu,A Rakshit,M Das; Electrochim.Acta,17,1921 (1972)
1972KRc K Kundu,A Rakshit,M Das; J.Chem.Soc.,Dalton Trans.,381 (1972)
1972SAc D Singh,S Aggarwal; Z.Phys.Chem.,(Frankfurt),81,1 (1972)
1972WFa H Wada,Q Fernando; Anal.Chem.,44,1640 (1972)
1971BHa H Brookes,M Hotz,A Spong; J.Chem.Soc.(A),2410 (1971)
1971BPa P Beronius,L Pataki; Acta Chem.Scand.,25,3705 (1971)
1971CBc D Cogley,J Butler,E Grunwald; J.Phys.Chem.,75,1477 (1971)
1971CSa J Carr,D Swartzfager; Anal.Chem.,43,1520 (1971)
1971CSb J Carr,D Swartzfager; Anal.Chem.,43,583 (1971)
1971DAa A D'Aprano; J.Phys.Chem.,75,3290 (1971)
1971ENa D Evans,J Nadas,M Matesisch; J.Phys.Chem.,75,1708 (1971)
1971FCa P Fruh,J Clerc,W Simon; Helv.Chim.Acta,54,1445 (1971)
1971FRa H Frensdorff; J.Am.Chem.Soc.,93,600 (1971)
1971HEa Y Herzberg; Diss.Lensovet Len.Tech.Institute (1971)
1971HFa J Havir,A Fidler; Acta Chim.Acad.Sci.Hung.,69,163 (1971)
1971HNb A Holmgren,A Nilsson,P Beronius; Radiochem.Radioanal.Lett.,6,339 (1971)
1971HPa E Hanna,A Pethybridge,J Prue; Electrochim.Acta,16,677 (1971)
1971INa R Izatt,D Nelson,J Rytting et al; J.Am.Chem.Soc.,93,1619 (1971)
1971JBa M Justice,R Bury,J Justice; Electrochim.Acta,16,687 (1971)
1971JKa J Juillard,I Kolthoff; J.Phys.Chem.,75,2496 (1971)
1971LFa W Lutz,P Fruh,W Simon; Helv.Chim.Acta,54,2767 (1971)
1971MEb N Melchior; Science,171,1267 (1971)
1971NIa I Nikitina; Cand.Thes.Lensovet Len.Tech.Institute (1971)
1971PGa R Paul,D Gill,J Singla,S Narula; Indian J.Chem.,9,63 (1971)
1971PJa R Paterson,S Jalota,H Dunsmore; J.Chem.Soc.(A),2116 (1971)
1971SSb A Shkodin,L Sadovnichaya,S Rosenko; Elektrokhim.,7,51(E:46) (1971)
1971TGa B Tronov,A Goncharov,A Tronov; Zh.Obshch.Khim.,41,2,280 (1971)
1971YIa M Yamane,T Iwachido,K Toei; Bull.Chem.Soc.Jpn.,44,745 (1971)
1970ALa F Accasina,R de Lisi,M Goffredi; Electrochim.Acta,15,1209 (1970)
1970BKb T Broadwater,R Kay; J.Phys.Chem.,74,3802; J.Chim.Phys.,68,56 (1970)
1970BWc P Beronius,G Wikander,A Nilsson; Z.Phys.Chem.,(Frankfurt),70,52 (1970)
1970CDa F Calmes-Perraud,Y Doucet; Compt.Rend.,271C,780 (1970)
1970CSa J Carr,D Swartzfager; Anal.Chem.,42,1238 (1970)
1970FKb A Fidler,F Kralik; Collec.Czech.Chem.Commun.,35,1913 (1970)
1970LWb W Lutz,H Wipf,W Simon; Helv.Chim.Acta,53,1741 (1970)
1970MRb M Mohan,G Rechnitz; J.Am.Chem.Soc.,92,5839 (1970)
1970MSa S McLaughlin,G Szabo,G Eisenman et al; 14th.Bio.Soc.Baltimore,p.96a (1970)
1970PCa J Prestegard,S Chan; J.Am.Chem.Soc.,92,4440 (1970)
1970PSa P Pearce,W Strauss; Australian J.Chem.,23,905 (1970)
1970RMb G Rechnitz,M Mohan; Science,168,1460 (1970)
1970SAf D Singh,I Aggarwal; Z.Phys.Chem.,(Frankfurt),73,144 (1970)
1970SSb K Sano,M Sakuma,S Motomizu et al; Bull.Chem.Soc.Jpn.,43,2457 (1970)
1970YKb H Yeager,B Kratochvil; J.Phys.Chem.,74,963 (1970)

1969BJa R Bury,M Justice,J Justice; Compt.Rend.,268C,670 (1969)
1969DLa A Demortier,G Lepoutre; Compt.Rend.,268C,453 (1969)
1969FOc G Forcier,J Olver; Electrochim.Acta,14,135 (1969)
1969GUb W Guenther; J.Am.Chem.Soc.,91,7619 (1969)
1969GUc E Guggenheim; Trans.Faraday Soc.,65,2474 (1969)
1969HEa H Helgeson; Am.J.Sci.,267,729 (1969)
1969HFa D Hartmann,E Franck; Ber.Buns.Phys.Chem.,73,514 (1969)
1969IEa R Izatt,D Eatough,J Christensen et al; J.Chem.Soc.(A),45;47 (1969)
1969IRa R Izatt,J Rytting,D Nelson et al; Science,164,443 (1969)
1969MFb I McKenzie,R Fuoss; J.Phys.Chem.,73,1501 (1969)
1969NSa G Nichugovskii,V Shvedov; Zh.Neorg.Khim.,14,299(E:156) (1969)
1969SBe B Sesta,M Berardelli; Ricerca Sci.,39,795;803 (1969)
1969SHe H Sadek,A Hafez,F Khalil; Electrochim.Acta,14,1089 (1969)
1968ATb E Andalaft,R Tomkins,G Janz; Can.J.Chem.,46,2959 (1968)
1968BTc R Bury,C Treiner; J.Chim.Phys.,65,1410;1494 (1968)
1968CFa Y Chiu,R Fuoss; J.Phys.Chem.,72,4123 (1968)
1968CPb F Conti,G Pistoia; J.Chim.Phys.,72,2245 (1968)
1968DIb A Dill,L Itzkowitz,O Popovych; J.Phys.Chem.,90,4580 (1968)
1968HRb T Hseu,G Rechnitz; Anal.Lett.,1,629 (1968)
1968SSa J Sudmeier,A Senzel; J.Am.Chem.Soc.,90,6860 (1968)
1968SSc J Sudmeier,A Sengel; Anal.Chem.,40,1693 (1968)
1968WPa H Wipf,L Pioda,Z Stefanac,W Simon; Helv.Chim.Acta,51,377 (1968)
1968WSa J Watters,O Schupp; J.Inorg.Nucl.Chem.,30,3359 (1968)
1967AKa R Alexander,E Ko,Y Mac et al; J.Am.Chem.Soc.,89,3703 (1967)
1967BHc J Butler,R Huston,P Hsu; J.Phys.Chem.,71,3294 (1967)
1967BNb D Bearcroft,N Nachtrieb; J.Phys.Chem.,71,316 (1967)
1967CIa R Carroll,R Irani; Inorg.Chem.,6,1994 (1967)
1967CKa M Chantooni,un,I Kolthoff; J.Am.Chem.Soc.,89,1582 (1967)
1967CMc R Carroll,R Mesmer; Inorg.Chem.,6,1137 (1967)
1967EGa W Eaton,P George,G Hanania; J.Phys.Chem.,71,2016 (1967)
1967JTa G Janz,M Tait; Can.J.Chem.,45,1101 (1967)
1967KHe R Kay,B Hales,G Cunningham; J.Phys.Chem.,71,3925 (1967)
1967LEa A Lerman; Geochim.Cosmo.Acta,31,2309 (1967)
1967PWb L Pioda,H Wachter,R Dohner,W Simon; Helv.Chim.Acta,50,1373 (1967)
1967RMd Y Rutkovskii,V Mironov; Zh.Neorg.Khim.,12,3287 (1967)
1967RMe A Rozen,A Mikhailichenko; Zh.Neorg.Khim.,12,741 (1967)
1967SCa P Sears,J Caruso,A Popov; J.Phys.Chem.,71,905 (1967)
1967WMa J Watters,S Matsumoto; J.Inorg.Nucl.Chem.,29,2955 (1967)
1966AKa M Abramson,R Katzman,H Gregor,R Curci; Biochemistry,5,2207 (1966)
1966CLb R Chlebek,M Lister; Can.J.Chem.,44,437 (1966)
1966LCa E Luksha,C Criss; J.Phys.Chem.,70,1496 (1966)
1966MBb W Masterton,L Berka; J.Phys.Chem.,70,1924 (1966)
1966MRb V Mironov,Y Rutkovskii; Zh.Neorg.Khim.,11,1792 (1966)
1966MWb S Minc,L Werblan; Rocz.Chem.,40,1537;1753 (1966)
1966QMa A Quist,W Marshall; J.Phys.Chem.,70,3714 (1966)
1966SAa L Savedoff; J.Am.Chem.Soc.,88,664 (1966)
1966SSc C Suelter,R Singleton,F Kayne; Biochemistry,5,131 (1966)
1965BCa J Botts,A Chashin,H Young; Biochemistry,4,1788 (1965)
1965BFb I Bellobono,G Favini; Ann.Chim.(Italy),55,32 (1965)
1965HKa J Hawes,R Kay; J.Phys.Chem.,69,2420 (1965)

1965LIa D Luehrs,R Iwamoto,J Kleinberg; Inorg.Chem.,4,1739 (1965)
1964FMb G Fowles,W McGregor; J.Phys.Chem.,68,1342 (1964)
1964FPa V Frei,J Podlahova,J Podlaha; Collec.Czech.Chem.Commun.,29,2587 (1964)
1964JMb G Janz,A Marcinkowsky,I Ahmad; Electrochim.Acta,9,1687 (1964)
1964KLa O Kolling,J Lambert; Inorg.Chem.,3,202 (1964)
1964PSh P Protsenko,O Shokina,N Chekhunova; Zh.Fiz.Khim.,38,1857 (1964)
1964RZa G Rechnitz,S Zamochnick; Talanta,11,1061 (1964)
1963EDa L Erikson,J Dembo; J.Phys.Chem.,67,707 (1963)
1963IFb H Irving,J Frausto da Silva; J.Chem.Soc.,448;458;3308 (1963)
1963PSa G Parfitt,A Smith; Trans.Faraday Society,59,257 (1963)
1963QFa A Quist,E Franck et al; J.Phys.Chem.,67,2453 (1963)
1963SGd G Schwarzenbach,G Geier; Helv.Chim.Acta,46,906 (1963)
1963SKa V Shvedov,K Kotegov; Radiokhim.,5,374 (1963)
1962MWa S Minc,L Werblan; Electrochim.Acta,7,257 (1962)
1962SHd A Shkodin; Zh.Fiz.Khim.,36,595 (1962)
1961BKb H Brusset,M Kikindai; Compt.Rend.,252,1777 (1961)
1961PSa P Proll,L Sutcliffe; Trans.Faraday Society,57,1078 (1961)
1961WAa M Walser; J.Phys.Chem.,65,159 (1961)
1961WLa J Wright,W Lindsay,T Druga; US AEC - Report TID-4500 (WAPD-TM-204) (1961)
1960CEa M Crutchfield,J Edwards; J.Am.Chem.Soc.,82,3533 (1960)
1959BOa E Bock; Can.J.Chem.,37,1888 (1959)
1959DDa J Das,P Das,D Patnaik; J.Indian Chem.Soc.,36,761 (1959)
1959WOa J Wolhoff,J Overbeek; Rec.Trav.Chim.,78,759 (1959)
1958BSb K Brauer,H Strehlow; Z.Phys.Chem.,(Frankfurt),17,346 (1958)
1958DTa C Davies,G Thomas; J.Chem.Soc.,3660 (1958)
1957CPa S Cohen,R Plane; J.Phys.Chem.,61,1096 (1957)
1957GKa J Graham,G Kell,A Gordon; J.Am.Chem.Soc.,79,2356 (1957)
1957HUa S Hughes; J.Chem.Soc.,634 (1957)
1957LSa M Lewis,H Saroff; J.Am.Chem.Soc.,79,2112 (1957)
1957LWa S Lambert,J Watters; J.Am.Chem.Soc.,79,4262;5606 (1957)
1957PGa E Purlee,E Grunwald; J.Am.Chem.Soc.,79,1366 (1957)
1957WBa F Wold,C Ballou; J.Biol.Chem.,227,301 (1957)
1957WLa J Watters,S Lambert,E Loughran; J.Am.Chem.Soc.,79,3651 (1957)
1956BKa S Bruckenstein,I Kolthoff; J.Am.Chem.Soc.,78,2974 (1956)
1956BMa J Bevan,C Monk; J.Chem.Soc.,1392 (1956)
1956HUa S Hughes; J.Chem.Soc.,998 (1956)
1956LLa N Lichtin,H Leftin; J.Phys.Chem.,60,160;161 (1956)
1956SAc R Smith,R Alberty; J.Phys.Chem.,60,180 (1956)
1956SPc M Spiro; J.Phys.Chem.,60,976 (1956)
1956TMa G Thomas,C Monk; Trans.Faraday Society,52,685 (1956)
1955GMa F Gimblett,C Monk; Trans.Faraday Society,51,793 (1955)
1955RSa R Robinson,R Stokes; "Electrolyte Solutions".,p.396;400 (1955)
1954FUa W Fernelius,L van Uitert; Acta Chem.Scand.,8,1726 (1954)
1954JGa M Jones,E Griswold; J.Am.Chem.Soc.,76,3247 (1954)
1954MEa N Melchior; J.Biol.Chem.,208,615 (1954)
1954PSa T Pavlopoulous,H Strehlow; Z.Phys.Chem.,(Frankfurt),2,89 (1954)
1953CSa J Cobble,W Smith; J.Am.Chem.Soc.,75,5777 (1953)
1951DMb T Denney,C Monk; Trans.Faraday Society,47,992 (1951)
1951EKa E Evers,A Knox; J.Am.Chem.Soc.,73,1739 (1951)

1950JMa I Jenkins,C Monk; J.Am.Chem.Soc.,72,2695 (1950)
1950JMc J James,C Monk; Trans.Faraday Society,46,1041 (1950)
1950WCa J van Wazer,D Campanella; J.Am.Chem.Soc.,72,655 (1950)
1949HKa V Hnizda,C Kraus; J.Am.Chem.Soc.,71,1565 (1949)
1949JAa J James; Trans.Faraday Society,45,855 (1949)
1949MOa C Monk; J.Chem.Soc.,423;427 (1949)
1948MOa C Monk; J.Am.Chem.Soc.,70,3281 (1948)
1947JAa J James; Thesis,London (1947)
1945JOa J Jones; J.Am.Chem.Soc.,67,855 (1945)
1937DAa C Davies; J.Am.Chem.Soc.,59,1760 (1937)
1937ROa R Robinson; J.Am.Chem.Soc.,59,84 (1937)
1934AKa G Akerlof; J.Am.Chem.Soc.,56,1439 (1934)
1931BRb W Banks,E Righellato,C Davies; Trans.Faraday Society,27,621 (1931)
1930RDa E Righellato,C Davies; Trans.Faraday Society,26,592 (1930)
1927DAb C Davies; Trans.Faraday Society,23,351 (1927)
1927ONa L Onsager; Physik Z.,28,277 (1927)
1923LRa G Lewis,M Randall; Thermodynamics,McGraw-Hill.,p.417 (1923)
1902KSa F Kohlrausch,H von Steinwehr; Sitzungsber Akad.Wiss Berlin,581 (1902)

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
R or IUP=R signifies EVALUATION RATING = Recommended by IUPAC

END