

SC-Database

Software version = 5.81 Data version = 4.62

Experiment list contains 10 experiments for

(no ligands specified)

2 metals : Es++, Es+++

(no references specified)

(no experimental details specified)

 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

 Es++ dis alc/w U K1=4.70 1993MKa (83350) 1
 Medium: 10 mol/l H2O in EtOH; for 100% H2O K1=2.64
 ionic strength ~0.003 M, temp. is not indicated

 C18H15B L CAS 960-71-4 (2107)
 Triphenylboron; B(C6H5)3

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

 Es++ sol alc/w 25°C 80% U K1=0.79 B2=2.03 1988MKc (96974) 2

 e- HL Electron (442)
 Electron;

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

 Es+++ oth none 25°C 0.0 U 1972MRd (457) 3
 K(Es+e=Es(II))=-26.2(-1.55V)

Method:Estimated data

 Es+++ oth none 25°C 0.0 U 1969NBa (458) 4
 K(Es+e=Es(II))=-27.0(-1.6V)

Method:Estimated data

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

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

 Es+++ dis NaClO4 25°C 1.0M U K1=-0.02 1972HPa (4804) 5

 OH- HL Hydroxide (57)
 Hydroxide;

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

Es+++ dis NaClO4 ? 0.10M U 1973HHd (11298) 6
*K1=-5.14

Medium: LiClO4

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

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

Es+++ dis NaClO4 25°C 1.0M U T K1=0.56 B2=-1.4 1972HPb (14933) 7
B3=0.47

S04-- H2L Sulfate CAS 7664-93-9 (15)
Sulfate;

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

Es+++ dis none 25°C 0.0 U K1=3.81 B2=5.66 1972MCC (16156) 8
B3=5.07

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

Es+++ dis NaClO4 25°C 0.10M U 1974HHa (46078) 9
K(EsL2+6H)=14.09
K(EsL(HL)+5H)=9.68

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

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

Es+++ ix R4N.X 25°C 0.10M U K1=22.62 1965BAC (89216) 10
Medium: NH4ClO4

REFERENCES

- 1993MKa N Mikheev,S Kulyukin,I Veleshko; Radiokhim.,35,43 (1993)
- 1988MKc N Mikheev,S Kulyukhin et al; Radiokhim.,30,218 (1988)
- 1974HHa S Hubert,M Hussonois,L Brillard et al; J.Inorg.Nucl.Chem.,36,2361 (1974)
- 1973HHd M Hussonois,S Hubert,L Brillard et al; Radiochem.Radioanal.Lett.,15,47 (1973)
- 1972HPa H Harmon,J Peterson,W McDowell; Inorg.Nucl.Chem.Lett.,8,57 (1972)
- 1972HPb H Harmon,J Peterson et al; J.Inorg.Nucl.Chem.,34,1381 (1972)
- 1972MCC W McDowell,C Coleman; J.Inorg.Nucl.Chem.,34,2837 (1972)
- 1972MRd N Mikheev,A Rumer; Radiokhim.,14,492(E:502) (1972)
- 1969NBa L Nugent,R Baybarz,J Burnett; J.Phys.Chem.,73,1177 (1969)
- 1965BAC R Baybarz; J.Inorg.Nucl.Chem.,27,1831 (1965)

EXPLANATORY NOTES

EVALUATION Flags are :-

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

END