

SC-Database

Software version = 5.81 Data version = 4.62

Experiment list contains 25 experiments for
(no ligands specified)

Metal : Ac+++

(no references specified)

(no experimental details specified)

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

Bromide;

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

Ac+++ dis NaClO4 27°C 1.0M U K1=-0.25 B2=-0.52 1968SMc (1716) 1
Medium: HClO4

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

Chloride;

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

Ac+++ dis NaClO4 20°C 3.00M U K1=0.44 B2=0.31 1982FKb (4440) 2

Ac+++ dis NaClO4 25°C 4.0M U K1=-0.04 B2=-1.04 1969SSa (4441) 3
B3=-1.26

Ac+++ dis NaClO4 27°C 1.0M U K1=-0.10 B2=-0.62 1968SMc (4442) 4

Medium: HClO4

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

Fluoride;

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

Ac+++ oth NaClO4 25°C 0.10M U K1=2.95 1973MSg (6694) 5
method:electromigration or transference number

Ac+++ dis NaClO4 25°C 0.50M U K1=2.72 B2=5.22 1970ALb (6695) 6
B3=7.9

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

Nitrate;

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

Ac+++ dis NaClO4 27°C 1.0M U K1=0.12 B2=0.01 1968SMc (9565) 7

OH- HL Hydroxide (57)

Hydroxide;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
Ac+++	oth	NaClO4	RT	0.10M	C				1992KNa (10881)	8
*B3=-31.9										
Method: electromigration. Medium: 0.10 M NaClO4/HClO4.										
Ac+++	dis	oth/un	25°C	0.10M	U				1969MGf (10882)	9
*K1=-8.5										
Medium: LiClO4 with tris-buffer										
Ac+++	sol	none	?	0.0	M				1965ZSa (10883)	10
Kso=-18.68(fresh) Kso=-20.89(aged)										

PO4---		H3L		Phosphate			CAS	7664-38-2	(176)	
Phosphate;										
Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
Ac+++	dis	R4N.X	25°C	0.50M	U				1970RSd (13080)	11
K(Ac+H2L)=1.59										
Medium: NH4ClO4										

SCN-		HL		Thiocyanate			CAS	463-56-9	(106)	
Thiocyanate;										
Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
Ac+++	dis	NaClO4	25°C	5.0M	U		K1=-0.75	B2=-0.46	1969SSa (14798)	12
Ac+++	dis	NaClO4	27°C	1.0M	U		K1=0.05	B2=-0.09	1968RSj (14799)	13

SO4--		H2L		Sulfate			CAS	7664-93-9	(15)	
Sulfate;										
Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
Ac+++	dis	NaClO4	25°C	0.50M	U		K1=1.75	B2=2.64	1970ALb (15963)	14
Ac+++	dis	NaClO4	25°C	1.0M	U		K1=1.36	B2=2.68	1969SSa (15964)	15
Ac+++	dis	NaClO4	27°C	1.0M	U		K1=1.20	B2=1.85	1968SMc (15965)	16
Medium: HClO4										

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

Ac+++ oth oth/un 25°C 0.10M U K1=4.36 B2=11.44 1972MSH (18774) 17
Method : electrical migration or transference number

Ac+++ dis NaClO4 25°C 0.50M U K1=4.47 B2=8.00 1970ALB (18775) 18

Ac+++ dis NaClO4 25°C 1.00M U K1=3.56 B2=6.16 1969SSA (18776) 19

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

Ac+++ oth oth/un ? ? U M 1969MGF (46011) 20
K(AcOH+L)=4.18
K(AcOH+2L)=7.0
K(Ac(OH)2+L)=4.3

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

Ac+++ oth oth/un ? 0.10M U K1=14.2 1972MSG (73566) 21
K(AcL+H)=2.45

Method: electrical migration or transference number

C12H12N2O2 HL CAS 4173-74-4 (4915)

1-Phenyl-3-methyl-4-acetylpyrazol-5-one;

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

Ac+++ dis oth/un 25°C 0.10M U 1973BKc (81039) 22
B3=6.65

C14H9O2F3 HL (3429)

1,1,1-Trifluoro-1'-naphthoylacetone;

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

Ac+++ dis oth/un 25°C 0.10M U 1969KSa (86868) 23
B3=14.63

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

Ac+++ oth oth/un 25°C 0.10M U K1=15.7 1972MSH (88571) 24

Method: electrical migration or transference number.

C17H14N2O2 L CAS 4551-69-3 (698)
4-Benzoyl-3-methyl-1-phenyl-2-pyrazolin-5-one;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg K values	Reference	ExptNo
Ac+++	dis	oth/un	25°C	0.10M	U		B2=11.58	1973BKc (95872)	25

REFERENCES

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1969SSa T Sekine,M Sakairi; Bull.Chem.Soc.Jpn.,42,2712 (1969)
1968RSj C Rao,C Shahani,K Mathew; Inorg.Nucl.Chem.Lett.,4,655 (1968)
1968SMc C Shahani,K Mathew,C Rao,M Ramaniah; Radiochim.Acta,10,165 (1968)
1965ZSa D Ziv,I Shestakova; Radiokhim.,7,175 (1965)

EXPLANATORY NOTES

DATA Flags are :-

M Data for TERNARY Complexes

END