

SC-Database

Software version = 5.81 Data version = 4.62

Experiment list contains 74 experiments for

(no ligands specified)

3 metals : Ir(IV), Ir+, Ir+++

(no references specified)

(no experimental details specified)

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e- HL Electron (442)  
Electron;

Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
Ir(IV)	vlt	NaClO4	25°C	1.00M	U			1971JPa K(Ir++++ + e)=21.5(1.27V)	(598)	1
Medium: HClO4; also data in 0.18 M H2SO4 and 0.3 M H3PO4										
Ir(IV)	vlt	NaClO4	25°C	0.10M	U	I		1971JPa K(IrCl6-- + e)=15.20(899mV)	(599)	2
K(IrBr6-- + e)=14.17(838mV). Background 0 (corr), K=13.61(805mV)										
Ir(IV)	EMF	oth/un	25°C	0.40M	U			1967EBa K=22.0, 1300 mV K'=20.6, 1220 mV	(600)	3
Medium: 0.4 M HClO4. K: 1,2,3,IrCl3(H2O)3+ + e = 1,2,3,IrCl3(H2O)3 K': trans-IrCl4(H2O)2 + e = trans-IrCl4(H2O)2-										
Ir(IV)	EMF	KNO3	25°C	0.20M	U	H		1965CGb K(IrCl5+e)=17, 1000 mV K(IrCl4+e)=20, 1200 mV	(601)	4
Medium: 0.2 M HNO3										
Ir(IV)	EMF	NaCl	25°C	1.00M	U	I		1964KPa K(IrCl6+e)=15.77, 933 mV	(602)	5
In 1 M HCl, K=15.76, 932 mV										
Ir(IV)	EMF	none	25°C	0.00	U			1957GHa K(IrCl6-- + e)=14.65(866.5mV)	(603)	6
Ir(IV)	oth	none	25°C	0.0	U			1952LAb K=62.6(930 mV)	(604)	7
K: IrO2(s)+4H+4e=Ir(s)+2H2O. From thermodynamic data. K(Ir(IV)Cl6+4e=Ir(s)+6Cl)=56.4(835 mV)										
Ir(IV)	EMF	none	20°C	0.0	U			1947DMa K=17.0(990 mV)	(605)	8
K: Ir(IV)Br6+e=Ir(III)Br6										
Ir(IV)	EMF	oth/un	25°C	1.0M	U			1945PIa	(606)	9

K=16.0(947 mV)

Medium: NaBr. K: Ir(IV)Br<sub>6</sub>+e=Ir(III)Br<sub>6</sub>

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Ir(IV)	EMF oth/un	25°C	1.0M	U				1945PIa	(607)	10
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K=8.2(485 mV)

Medium: KI. K:IrI<sub>6</sub>+e=Ir(III)I<sub>6</sub>

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Ir(IV)	EMF none	20°C	0.0	U				1944DMa	(608)	11
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K(IrCl<sub>6</sub>+e)=17.49, 1017 mV

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Ir(IV)	EMF NaCl	25°C	0.50M	U	I			1942GSa	(609)	12
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K=16.52(977 mV)

K: Ir(IV)Cl<sub>6</sub>+e=Ir(III)Cl<sub>6</sub>. I=2.0 M:K=16.67(986 mV), I=0.01 M:K=16.45(973 mV)

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Ir(IV)	EMF KCl	25°C	1.0M	U	T			1931W0a	(610)	13
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K=17.36(1026.4 mV)

Medium: HCl. K: Ir(IV)Cl<sub>6</sub>+e=Ir(III)Cl<sub>6</sub>. 20 C: K=17.74(1031.3 mV)

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

Bromide;

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Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
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Ir(IV)	EMF NaCl04	25°C	0.10M	U				1971KTh	(2066)	14
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K(Ba+IrL<sub>6</sub>)=2.3  
K(Cd+IrL<sub>6</sub>)=1.6

Medium: HCl04

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FClBrI HL (541)

Halides, comparative (for book data under ligand 80)

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Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
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Ir(IV)	sp oth/un	100°C	conc	U				1965BPf	(7407)	15
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K(IrCl<sub>6</sub>+Br=IrCl<sub>5</sub>Br+Cl)=0.90  
K(IrCl<sub>5</sub>Br+Br)=0.74  
K(IrCl<sub>4</sub>Br<sub>2</sub>+Br)=0.52  
K(IrCl<sub>3</sub>Br<sub>3</sub>+Br)=0.29

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OH- HL Hydroxide (57)

Hydroxide;

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Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
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Ir(IV)	kin NaCl04	20°C	2.06M	U				1976TZa	(11653)	16
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K(Ir(H<sub>2</sub>O)<sub>5</sub>OH+H=Ir(H<sub>2</sub>O)<sub>6</sub>)=0.40

Ion exchange also used

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Ir(IV)	kin oth/un	25°C	0.10M	U				1971KSe	(11654)	17
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B1'=7.08

B2'=6.45

B3'=6.04

B4'=5.18

Bn':  $\text{IrCl}(7-n)(\text{OH})_{n-1} + \text{OH} = \text{IrCl}(6-n)(\text{OH})_n + \text{Cl}$

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

Sulfate;

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Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir(IV) kin oth/un 20°C 2.40M U 1979TZa (16265) 18

$K(\text{Ir}(\text{H}_2\text{O})_5(\text{HSO}_4))=0.92$

$K(\text{Ir}(\text{H}_2\text{O})_4(\text{HSO}_4)_2)=0.15$

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H2 L Hydrogen (6864)

Dihydrogen;

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Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+ cal non-aq ??? 100% U HM 1993BSb (7517) 19

Medium: Cyclohexane.  $\text{DH}(\text{IrABC}_2+\text{L}=\text{IrLABC}_2)=-100.4 \text{ kJ mol}^{-1}$

A:Cl. B:CO. C:Triphenylphosphine.

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

Iodide;

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Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+ sp non-aq ? 100% U I M 1972FOa (8185) 20

$K=3.7$

Medium: 1,2-dichloroethane.  $K: \text{Ir}(\text{CO})_2\text{Cl}_2+2\text{L}=\text{Ir}(\text{CO})_2\text{L}_2+2\text{Cl}$ .  $K=2.6(\text{MeCN})$ ;

$K=1.3(90\% \text{ MeCN}/\text{H}_2\text{O})$ . Other equilibria reported

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CH03F3S HL CAS 1493-13-6 (6755)

Trifluoromethanesulfonic acid; CF3SO3H

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Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+ cal non-aq 25°C 100% U HM 1991SZa (17465) 21

Medium: C2H4Cl2.  $\text{DH}(\text{Ir}(\text{CO})\text{AB}+\text{HL}=(\text{Ir}(\text{CO})\text{ABH})\text{L}(\text{ion pair}))=-122.2 \text{ kJ mol}^{-1}$

A=P(p-ClC6H4)3. B=C5H5. Data also for other complexes

-----  
Ir+ cal non-aq 25°C 100% U HM 1991SZa (17466) 22

Medium: C2H4Cl2.  $\text{DH}(\text{Ir}(\text{CO})_2\text{A}+\text{HL}=(\text{Ir}(\text{CO})_2\text{AH})\text{L}(\text{ion pair}))=-89.5 \text{ kJ mol}^{-1}$

A=C5H5 Data also for complexes with phosphine substituents

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C5H6 HL Cyclopentadiene CAS 542-92-7 (4288)

Cyclopentadiene; cyclo(-CH:CH.CH2.CH:CH-)

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Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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 Ir+ cal non-aq 25°C 100% U HM 1991SAa (37077) 23  
 Medium:1,2-Dichloroethane. DH(IrLA+CF3SO3)=-95.4 kJ mol-1  
 A:1,5-Cyclooctadiene. Data also for methyl substituted cyclopentadienes  
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 C6H16Si L (6829)  
 Triethylsilane;  
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Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
Ir+	nmr	non-aq	20°C	100%	U	T HM			1992HBa (51797)	24
								K(A2TaBIr(CO)2+L)=2.88		
								Method:NMR. Medium:toluene. K=4.01(-20C);3.69(0);2.32(40);1.80(60);1.63(70). A:C5H5. B:CH2.CH2. DH=-46.9 kJ mol-1; DS=-105. Deuterated ligand K=3.04		
								*****		
								C9H21P L CAS 6476-36-4 (168)		
								Tri-isopropylphosphine; ((CH3)2CH)3P		

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Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
Ir+	sp	non-aq	80°C	100%	U	M			1969SM1 (68227)	25
								K(H2(soln)+Ir(CO)ClL2)=2.79 K(H2(soln)+Ir(CO)BrL2)=3.21 K(H2(soln)+Ir(CO)IL2)=4.23		
								Medium: Toluene		
								*****		
								C12H8N2 L Phenanthroline CAS 66-71-7 (144)		
								1,10-Phenanthroline;		

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Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
Ir+	sp	oth/un	25°C	u	U	M			1982HLb (80471)	26
								K(IrCl(COD)(4-Pic)+L)=1.55		
								*****		
								C18H15P L CAS 603-35-0 (621)		
								Triphenylphosphine; (C6H5)3P		

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Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
Ir+	sp	non-aq	80°C	100%	U	M			1969SM1 (97140)	27
								K(H2(soln)+Ir(CO)ClL2)=2.22 K(H2(soln)+Ir(CO)BrL2)=3.79 K(H2(soln)+Ir(CO)IL2)=3.68		
								Medium: Toluene		
								*****		
								C18H33P L CAS 2622-14-2 (169)		
								Tri-(cyclohexyl)phosphine; (C6H11)3P		

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Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
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Ir+ sp non-aq 80°C 100% U M 1969SM1 (98313) 28  
 K(H2(soln)+Ir(CO)ClL2)=1.98  
 K(H2(soln)+Ir(CO)BrL2)=3.06  
 K(H2(soln)+Ir(CO)IL2)=2.49

Medium: Toluene

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C21H21P L CAS 6163-58-2 (600)  
 Tri(2-methylphenyl)phosphine (or 4-methyl where indicated); (CH3.C6H4)3P

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 Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+ sp non-aq 80°C 100% U 1969SM1 (101192) 29  
 K(H2(soln)+Ir(CO)ClL2)=2.43

Medium: Toluene. Ligand: tri(4-methylphenyl)phosphine

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e- HL Electron (442)  
 Electron;

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 Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+++ oth none 25°C 0.0 U 1968GHa (611) 30  
 K(IrCl6+3e=Ir(s)+6Cl)=43.6

Method:Literature evaluated data.

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

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 Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+++ sol oth/un 25°C 0.1M C T 1984ISd (2067) 31  
 Kout(Ir(phen)3+L)=0.91  
 Kout(Ir(phen)3+2L)=1.52

Medium: NaF;for I=0.25M K1out=0.92; I=0.5 K1out=0.78;B2out=1.17;B3out=1.56  
 I=0.75 K1out=0.80; B2out=1.10; B3out=1.32

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 Ir+++ kin oth/un 90°C var U 1972BGc (2068) 32  
 K(trans-Ir(en)2Cl2+L)=1.9

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 Ir+++ EMF NaClO4 25°C 0.10M U 1971KTh (2069) 33  
 K(Ba+IrL6)=2.78  
 K(Cd+IrL6)=2.9

Medium: HClO4

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CO L Carbon monoxide CAS 630-08-0 (551)  
 Carbon monoxide;

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 Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+++ sp non-aq 25°C 100% U M 1989KCb (2810) 34  
 K(IrA+L)=5.0

A=octaethylporphyrin(C<sub>3</sub>H<sub>7</sub>). Medium: benzene

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C03-- H2L Carbonate CAS 465-79-6 (268)

Carbonate;

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Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+++ kin NaCl04 25°C 2.0M C 2000KYb (3250) 35  
\*K(Ir(NH<sub>3</sub>)<sub>5</sub>HCO<sub>3</sub>)=-6.17

\*K is for loss of proton from HCO<sub>3</sub>-.

-----  
Ir+++ sp NaCl04 25°C 0.10M U 1976MPd (3251) 36  
Kout[Ir(en)<sub>3</sub>+L]=0.3

for I=0.5 M Kout=0.1

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

Chloride;

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Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+++ sol oth/un 25°C 0.0 U I 1989GPa (5106) 37  
Kout(cis-Ir(phen)<sub>2</sub>Cl<sub>2</sub>+Cl)=3.26

Medium: NaF. Also Kout=3.28 (I=0.1 M NaF), 2.76 (I=0.25 M),  
2.54 (I=0.50 M), 2.50 (I=0.75 M).

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Ir+++ sol oth/un 25°C 0.1M C T 1984ISd (5107) 38  
Kout(Ir(phen)<sub>3</sub>+L)=0.84  
Kout(Ir(phen)<sub>3</sub>+2L)=1.34

Medium: NaF; for I=0.25M K<sub>1</sub>out=0.83; I=0.5 K<sub>1</sub>out=0.74; B<sub>2</sub>out=1.06; B<sub>3</sub>out=1.13  
I=0.75 K<sub>1</sub>out=0.77; B<sub>2</sub>out=0.67; B<sub>3</sub>out=1.13

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Ir+++ EMF NaCl04 30°C 0.10M U T HM 1973KTc (5108) 39  
K(Ba+IrCl<sub>6</sub>)=-2.19

Medium: HCl04; DH=21 kJ mol<sup>-1</sup>. K=-2.16(35 C), -2.06(42 C), -1.98(50 C)

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Ir+++ EMF NaCl04 42°C 3.0M U T M 1973LKa (5109) 40  
K(K+IrCl<sub>6</sub>)=-0.34

Medium: LiCl. K=-0.11(50 C)

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Ir+++ kin NaCl 90°C var U 1972BGc (5110) 41  
K(trans-Ir(en)<sub>2</sub>+Cl)=1.4

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Ir+++ kin oth/un 35°C 1.0M U TI 1970KTb (5111) 42  
K<sub>6</sub>=-1.37

Medium: 1 M HCl04. K<sub>6</sub>=-1.29(42 C), -1.22(50 C), -1.13(60 C)  
In 3M HCl04: K<sub>6</sub>=-0.72(35 C), -0.68(42 C), -0.64(50 C), -0.59(60 C)

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Ir+++ kin NaCl04 25°C 1.03M U H 1969DDb (5112) 43  
K<sub>6</sub>=-1.08

Medium: HCl04. DS(K<sub>6</sub>)=-20.5 J K<sup>-1</sup> mol<sup>-1</sup>

-----  
Ir+++ kin NaClO4 45°C 3.70M U TI 1965CGb (5113) 44  
K5=0.67

Medium: Na,HClO4. At I=2.2 M: K5=0.55(50 C)

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Ir+++ gl oth/un 25°C var U 1965CGb (5114) 45  
K(IrCl4(H2O)OH+H)=8.5, 10.1

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Ir+++ sp NaClO4 50°C 2.20M U I 1962PGa (5115) 46  
K6=-0.9

K6=-0.4 (I=3.7).

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

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Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+++ sol oth/un 25°C 0.1M C T 1984ISd (6251) 47

Kout(Ir(phen)3+L)=1.21

Kout(Ir(phen)3+2L)=2.36

Medium: NaF;for I=0.25M K1out=1.22; I=0.5 K1out=1.27;B2out=1.61;B3out=2.50

I=0.75 K1out=1.16; B2out=1.47; B3out=2.24

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H2 L Hydrogen (6864)

Dihydrogen;

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Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+++ nmr non-aq 20°C 100% U T HM 1994HGa (7518) 48

Method: NMR. Medium: Toluene-d8. T:-10 to 20C. K: IrA2BC2+L. A:H, B:Cl,

C:PtBu2Me. DH=-28.5 kJ mol-1; DS=-80.3. Data also for D2 complexes

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

Iodide;

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Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+++ sol oth/un 25°C 0.1M C T 1984ISd (8186) 49

Kout(Ir(phen)3+L)=0.98

Kout(Ir(phen)3+2L)=1.66

Medium: NaF;for I=0.25M K1out=0.98; I=0.5 K1out=1.1;B2out=1.95;B3out=1.96

I=0.75 K1out=1.22; B2out=1.59

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

Ammonia

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Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+++ sol R4N.X 25°C 1.00M U 1995MPa (9171) 50

Kout(Ir(NH3)6+L)=1.09



Ir+++ gl oth/un rt var U 1957J0a (11658) 58  
 \*K1(IrCl5(H2O))=-10.1  
 \*K1(cis-Ir(py)2Cl3H2O)=-6.7  
 \*K1(trans-Irpy2(NH3)3H2O)=-5.1

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

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 Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+++ oth none 25°C 0 U 1988LIa (14405) 59  
 Kso(Ir2S3)=-196.3  
 \*Kso(Ir2S3)=-144.4

Derived from thermodynamic data and K(H+S=HS)=17.3.

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S03-- H2L Sulfite CAS 7782-99-2 (801)  
 Sulfite;

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 Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+++ sp NaCl04 25°C 0.10M U 1976MPd (15464) 60  
 Kout[Ir(en)3+L]=0.32

for I=0.5 M Kout=0.10

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

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 Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+++ sp NaCl04 25°C 0.10M U 1976MPd (16266) 61  
 Kout[Ir(en)3+L]=0.26

for I=0.5 M Kout=-0.09

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S203-- H2L Thiosulfate CAS 73686-28-7 (177)  
 Thiosulfate;

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 Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+++ sp NaCl04 25°C 0.10M U 1976MPd (16861) 62  
 Kout[Ir(en)3+L]=0.33

for I=0.5 M Kout=0.13

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Se03-- H2L Selenite CAS 7783-00-8 (2391)  
 Selenite;

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 Metal Mtd Medium Temp Conc Cal Flags Lg K values Reference ExptNo  
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Ir+++ sp NaCl04 25°C 0.10M U 1976MPd (17065) 63  
 Kout[Ir(en)3+L]=0.30

for I=0.5 M Kout=0.01

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 TeO3--                    H2L    Tellurite                    CAS 10049-23-7 (1165)  
 Tellurate(IV)  
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Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
Ir+++	sp	NaClO4	25°C	0.10M	U				1976MPd (17283)	64

Kout[Ir(en)3+L]=0.28

for I=0.5 M Kout=-0.03

\*\*\*\*\*  
 CH2O2                    HL    Formic acid                    CAS 64-18-6 (37)  
 Methanoic acid; H.COOH  
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Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
Ir+++	sol	oth/un	25°C	0.0	U	I			1989GPa (17619)	65

Kout(cis-Ir(phen)2Cl2+L)=0.93

Medium: NaF. Also Kout=0.66 (I=0.1 M NaF), 0.23 (I=0.25 M),  
 0.14 (I=0.50 M).

\*\*\*\*\*  
 C2H4O2                    HL    Acetic acid                    CAS 64-19-7 (36)  
 Ethanoic acid; CH3.COOH  
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Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
Ir+++	sol	oth/un	25°C	0.0	U	I			1989GPa (20010)	66

Kout(cis-Ir(phen)2Cl2+L)=1.67

Medium: NaF. Also Kout=1.38 (I=0.1 M NaF), 1.01 (I=0.25 M),  
 0.60 (I=0.50 M), 0.36 (I=0.75 M).

\*\*\*\*\*  
 C2H6OS                    L    DMSO                    CAS 67-68-5 (329)  
 Dimethylsulfoxide; (CH3)2.SO  
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Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
Ir+++	sp	non-aq	25°C	100%	U	M			1989KCb (22102)	67

K(IrA+L)=3.8

A=octaethylporphyrin(C3H7). Medium: benzene

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 C4H6N2                    L    N-Me-Imidazole                    CAS 616-47-7 (354)  
 N-Methyl-1,3-diazole; C3H3N2.CH3  
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Metal	Mtd	Medium	Temp	Conc	Cal	Flags	Lg	K values	Reference	ExptNo
Ir+++	sp	non-aq	25°C	100%	U	M			1989KCb (29601)	68

K(IrA+L)=5.6

A=octaethylporphyrin(C3H7). Medium: benzene

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 C5H5N                    L    Pyridine                    CAS 110-86-1 (31)  
 Pyridine, Azine;  
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Metal      Mtd Medium Temp Conc Cal Flags Lg K values      Reference ExptNo
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Ir+++      sp non-aq 25°C 100% U    M                    1989KCb (36647) 69
                                         K(IrA+L)=4.8
A=octaethylporphyrin(C3H7). Medium: benzene
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C5H6              HL    Cyclopentadiene  CAS 542-92-7 (4288)
Cyclopentadiene; cyclo(-CH:CH.CH2.CH:CH-)
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Metal      Mtd Medium Temp Conc Cal Flags Lg K values      Reference ExptNo
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Ir+++      sp NaClO4 25°C 0.20M C    M                    1999CEa (37078) 70
                                         *K(IrL(H2O)3)=-3.86
                                         K(2IrL(OH)=(IrL)2(u-OH)3)=-1.6
                                         K(IrL+Cl)=2.7
                                         K(IrL+Br)=3.5
K(IrL(py)+py)=4.9, K(IrL(dms)+dms)=>6, K(IrL(tu)+tu)=>6.
dms: dimethylsulfide; tu: thiourea.
*****
C6H15N              L    Triethylamine    CAS 121-44-8 (1340)
N,N,N-Triethylamine; (C2H5)3N
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Metal      Mtd Medium Temp Conc Cal Flags Lg K values      Reference ExptNo
-----
Ir+++      sp non-aq 25°C 100% U    M                    1989KCb (51179) 71
                                         K(IrA+L)=1.6
A=octaethylporphyrin(C3H7). Medium: benzene
*****
C6H15O3P           L                    CAS 122-52-1 (1723)
Triethylphosphite; (C2H5O)3P
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Metal      Mtd Medium Temp Conc Cal Flags Lg K values      Reference ExptNo
-----
Ir+++      sp non-aq 25°C 100% U    M                    1989KCb (51513) 72
                                         K(IrA+L)=8.2
A=octaethylporphyrin(C3H7). Medium: benzene
*****
C7H7NO              L    Benzamide        CAS 55-21-0 (2328)
Benzamide; C6H5.CO.NH2
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Metal      Mtd Medium Temp Conc Cal Flags Lg K values      Reference ExptNo
-----
Ir+++      sp NaClO4 25°C 1.0M U                    1975ZFa (55149) 73
                                         K(Ir(NH3)5+H-1L)=2.4
*****
C18H15P             L                    CAS 603-35-0 (621)
Triphenylphosphine; (C6H5)3P
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Metal      Mtd Medium Temp Conc Cal Flags Lg K values      Reference ExptNo
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Ir+++ sp non-aq 25°C 100% U M 1989KCb (97141) 74  
K(IrA+L)=6.1

A=octaethylporphyrin(C<sub>3</sub>H<sub>7</sub>). Medium: benzene

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#### EXPLANATORY NOTES

DATA Flags are :-

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

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END