Table 1.1. Diamagnetic Susceptibilities and Constitutive Corrections (in 10^{-6} cm^3 g atom^{-1} or 10^{-6} cm^3 mol^{-1})[a]

Atoms			
H	−2.9	As(III)	−20.9
C	−6.0	As(V)	−43.0
N (ring)	−4.6	F	−6.3
N (open chain)	−5.6	Cl	−20.1
N (imide)	−2.1	Br	−30.6
O (ether or alcohol)	−4.6	I	−44.6
O (carbonyl)	−1.7	S	−15.0
P	−26.3	Se	−23.0
Constitutive corrections			
C=C	5.5	C=N	0.8
C≡C	0.8	N=N	1.8
C in aromatic ring	−0.25	N=O	1.7
C=N	8.1	C—Cl	3.1
Cations			
Li^+	−1.0	Ca^{2+}	−10.4
Na^+	−6.8	Sr^{2+}	−19.0
K^+	−14.9	Ba^{2+}	−26.5
Rb^+	−22.5	Zn^{2+}	−15.0
Cs^+	−35.0	Cd^{2+}	−24
NH_4^+	−13.3	Hg^{2+}	−40
Mg^{2+}	−5.0		
Transition metal cations			
$^*Ti^{3+}$	−9	$^*Fe^{2+}$	−13
Ti^{4+}	−5	$^*Fe^{3+}$	−10
$^*V^{2+}$	−15	$^*Co^{2+}$	−12
$^*V^{3+}$	−10	$^*Co^{3+}$	−10
$^*V^{4+}$	−7	$^*Ni^{2+}$	−10
V^{5+}	−1	Cu^+	−12
$^*Cr^{2+}$	−15	$^*Cu^{2+}$	−11
$^*Cr^{3+}$	−11	$^*Mo^{2+}$	−31
$^*Mn^{2+}$	−14	$^*Mo^{3+}$	−23
$^*Mn^{3+}$	−10	$^*Mo^{4+}$	−12
$^*Mn^{4+}$	−8	*Rare earth^{3+}	−20
Anions			
O^{2-}	−12.0	CN^-	−13.0
S^{2-}	−30	NO^{2-}	−10.0
F^-	−9.1	NO_3^-	−18.9
Cl^-	−23.4	NCS^-	−31.0
Br^-	−34.6	CO_3^{2-}	−28
I^-	−50.6	ClO_4^-	−32.0
OH^-	−12.0	SO_4^{2-}	−40.1

(*Continued*)

Table 1.1. (*Continued*)

Some usual ligands	
H_2O	−13
NH_3	−18
CO	−10
CH_3COO^-	−30
$C_2O_4^{2-}$ oxalato	−25
$C_2H_8N_2$ ethylenediamine	−46
$C_5H_5^-$ cyclopentadienyl	−65
$C_5H_7O_2^-$ acetylacetonato	−52
C_5H_5N pyridine	−49
$C_4H_4N_2$ pyrazine	−50
$C_{10}H_8N_2$ bipyridine	−105
$C_{16}H_{14}N_2O_2^{-2}$ ethylenebis(salicylaminato)	−182
$C_{12}H_8N_2$ *o*-phenanthroline	−128

[a] Ions preceded by an asterisk are paramagnetic; only the underlying diamagnetism is indicated.