

TABLA 14-1 Potenciales normales de reducción en soluciones acuosas

E°, V	Par	E°, V
2.65	$F_2 + 2e^- = 2F^-$	1.91
2.07	$O_3 + 2H^+ + 2e^- = O_2 + H_2O$	1.82
1.77	$H_2O_2 + 2H^+ + 2e^- = 2H_2O$	1.77
1.695	$MnO_4^- + 4H^+ + 3e^- = MnO_2 + 2H_2O$	1.69
1.61	$Ce^{IV} + e^- = Ce^{III}$	1.61
1.6	$H_5IO_6 + H^+ + 2e^- = IO_3^- + 3H_2O$	1.60
1.52	$BrO_3^- + 6H^+ + 5e^- = \frac{1}{2}Br_2 + 3H_2O$	1.52
1.51	$MnO_4^- + 8H^+ + 5e^- = Mn^{++} + 4H_2O$	1.51
1.36	$Cl_2 + 2e^- = 2Cl^-$	1.36
1.33	$Cr_2O_7^{2-} + 14H^+ + 6e^- = 2Cr^{+++} + 7H_2O$	1.33
1.23	$MnO_2 + 4H^+ + 2e^- = Mn^{++} + 2H_2O$	1.23
1.229	$O_2 + 4H^+ + 4e^- = 2H_2O$	1.23
1.195	$IO_3^- + 6H^+ + 5e^- = \frac{1}{2}I_2 + 3H_2O$	1.19
1.065	$Br_2 + 2e^- = 2Br^-$	1.07
1.06	$ICl_2^- + e^- = \frac{1}{2}I_2 + 2Cl^-$	1.06
1.00	$VO_2^+ + 2H^+ + e^- = VO^{++} + H_2O$	1.00
0.87	$C_6H_5NO_2 + 7H^+ + 6e^- = C_6H_5NH_2 + 2H_2O$	0.87
0.799	$Ag^+ + e^- = Ag$	0.80
0.789	$Hg_2^{++} + 2e^- = 2Hg$	0.80
0.771	$Fe^{+++} + e^- = Fe^{++}$	0.77
0.73	$C_2H_2 + 2H^+ + 2e^- = C_2H_4$	0.73
0.699	$O=C_6H_4=O + 2H^+ + 2e^- = HOC_6H_4OH$	0.70
0.682	$O_2 + 2H^+ + 2e^- = H_2O_2$	0.68
0.586	$CH_3OH + 2H^+ + 2e^- = CH_4 + H_2O$	0.59
0.564	$MnO_4^- + e^- = MnO_4^{2-}$	0.56
0.536	$I_3^- + 2e^- = 3I^-$	0.54
0.5355	$I_2 + 2e^- = 2I^-$	0.54
0.521	$Cu^+ + e^- = Cu$	0.52
0.52	$C_2H_4 + 2H^+ + 2e^- = C_2H_6$	0.52
0.44	$HOCCH=CHCOOH + 2H^+ + 2e^- = HOCCH_2CH_2COOH$	0.44

TABLA 14-1 (continuación)

E°, V	Par.
0.361	$VO^{++} + 2H^+ + e^- = V^{+++} + H_2O$
0.36	$Fe(CN)_6^{3-} + e^- = Fe(CN)_6^{4-}$
0.337	$Cu^{++} + 2e^- = Cu$
0.31	$H_2C_2O_4 + 6H^+ + 6e^- = CH_3COOH + 2H_2O$
0.2676	$Hg_2Cl_2 + 2e^- = 2Hg + 2Cl^-$
0.222	$AgCl + e^- = Ag + Cl^-$
0.20	$CH_3COCOOH + 2H^+ + 2e^- = CH_3CHOHCOOH$
0.192	$CH_3CHO + 2H^+ + 2e^- = C_2H_5OH$
0.19	$HCHO + 2H^+ + 2e^- = CH_3OH$
0.17	$S_4O_6^{2-} + 2e^- = 2S_2O_3^{2-}$
0.17	$SO_4^{2-} + 4H^+ + 2e^- = H_2SO_3 + H_2O$
0.15	$Sn^{4+} + 2e^- = Sn^{2+}$
0.152	$Sb_2O_3 + 6H^+ + 6e^- = 2Sb + 3H_2O$
0.153	$Cu^{++} + e^- = Cu^+$
0.10	$TiO^{++} + 2H^+ + e^- = Ti^{+++} + H_2O$
0.1	$CO_2 + 6H^+ + 6e^- = CO(NH_2)_2 + H_2O$
0.095	$AgBr + e^- = Ag + Br^-$
0.056	$HCOOH + 2H^+ + 2e^- = HCHO + H_2O$
0.000	$2H^+ + 2e^- = H_2$
-0.118	$CH_3COOH + 2H^+ + 2e^- = CH_3CHO + H_2O$
-0.126	$Pb^{++} + 2e^- = Pb$
-0.13	$CrO_4^{2-} + 4H_2O + 3e^- = Cr(OH)_3 + 5OH^-$
-0.136	$Sn^{4+} + 2e^- = Sn$
-0.151	$AgI + e^- = Ag + I^-$
-0.196	$CO_2 + 2H^+ + 2e^- = HCOOH$
-0.255	$V^{+++} + e^- = V^{++}$
-0.276	$H_3PO_4 + 2H^+ + 2e^- = H_3PO_3 + H_2O$
-0.403	$Cd^{++} + 2e^- = Cd$
-0.41	$Cr^{+++} + e^- = Cr^{++}$
-0.44	$Fe^{++} + 2e^- = Fe$

TABLA 14-1 (continuación)

E°, V	Par
-0.49	$2\text{CO}_2 + 2\text{H}^+ + 2e^- = \text{H}_2\text{C}_2\text{O}_4$
-0.50	$\text{H}_3\text{PO}_3 + 2\text{H}^+ + 2e^- = \text{H}_2\text{PO}_2 + \text{H}_2\text{O}$
-0.56	$\text{Fe}(\text{OH})_3 + e^- = \text{Fe}(\text{OH})_2 + \text{OH}^-$
-0.763	$\text{Zn}^{++} + 2e^- = \text{Zn}$
-0.828	$2\text{H}_2\text{O} + 2e^- = \text{H}_2 + 2\text{OH}^-$
-1.18	$\text{V}^{++} + 2e^- = \text{V}$
-1.66	$\text{Al}^{+++} + 3e^- = \text{Al}$
-2.25	$\frac{1}{2}\text{H}_2 + e^- = \text{H}^-$
-2.37	$\text{Mg}^{++} + 2e^- = \text{Mg}$
-2.714	$\text{Na}^+ + e^- = \text{Na}$
-3.045	$\text{Li}^+ + e^- = \text{Li}$