Standard Reduction Potentials at 298 K

Reduction Half-Reaction	Standard Potential $E_{red}°$ (V)
$F_2(g) + 2e^- \rightarrow 2F^-(aq)$	+2.87
$O_3(g) + 2H_3O^+(aq) + 2e^- \rightarrow O_2(g) + 3H_2O(l)$	+2.076
$Co^{3+}(aq) + e^- \rightarrow Co^{2+}(aq)$	+1.92
$H_2O_2(aq) + 2H_3O^+(aq) + 2e^- \rightarrow 2H_2O(l)$	+1.776
$N_2O(g) + 2H_3O^+(aq) + 2e^- \rightarrow N_2(g) + 3H_2O(l)$	+1.766
$Ce^{4+}(aq) + e^- \rightarrow Ce^{3+}(aq)$	+1.72
$PbO_2(s) + SO_4^{2-}(aq) + 4H_3O^+(aq) + 2e^- \rightarrow PbSO_4(s) + 6H_2O(l)$	+1.6913
$MnO_4^-(aq) + 4H_3O^+(aq) + 3e^- \rightarrow MnO_2(s) + 6H_2O(l)$	+1.679
$NiO_2(s) + 4H_3O^+(aq) + 2e^- \rightarrow Ni^{2+}(aq) + 6H_2O(l)$	+1.678
$HClO_2(aq) + 2H_3O^+(aq) + 2e^- \rightarrow HClO(aq) + 3H_2O(l)$	+1.645
$2HClO_2(aq) + 6H_3O^+(aq) + 6e^- \rightarrow Cl_2(g) + 10H_2O(l)$	+1.628
$2HClO(aq) + 2H_3O^+(aq) + 2e^- \rightarrow Cl_2(g) + 4H_2O(l)$	+1.611
$H_5IO_6(s) + H_3O^+(aq) + 2e^- \rightarrow IO_3^-(aq) + 4H_2O(l)$	+1.601
$RuO_4^-(aq) + 4H_3O^+(aq) + 2e^- \rightarrow RuO_2^+(aq) + 6H_2O(l)$	+1.6
$2NO(g) + 2H_3O^+(aq) + 2e^- \rightarrow N_2O(g) + 3H_2O(l)$	+1.591
$IO_4^-(aq) + 2H_3O^+(aq) + 2e^- \rightarrow IO_3^-(aq) + 3H_2O(l)$	+1.589
$MnO_4^-(aq) + 8H_3O^+(aq) + 5e^- \rightarrow Mn^{2+}(aq) + 12H_2O(l)$	+1.507
$RuO_2^+(aq) + 2H_3O^+(aq) + e^- \rightarrow Ru(OH)_2^{2+}(aq) + 2H_2O(l)$	+1.5
$Au^{3+}(aq) + 3e^- \rightarrow Au(s)$	+1.498
$2ClO_3^-(aq) + 12H_3O^+(aq) + 10e^- \rightarrow Cl_2(g) + 18H_2O(l)$	+1.47
$PbO_2(s) + 4H_3O^+(aq) + 2e^- \rightarrow Pb^{2+}(aq) + 6H_2O(l)$	+1.455
$ClO_3^-(aq) + 6H_3O^+(aq) + 6e^- \rightarrow Cl^-(aq) + 9H_2O(l)$	+1.451
$BrO_3^-(aq) + 6H_3O^+(aq) + 5e^- \rightarrow 1/2Br_2(l) + 9H_2O(l)$	+1.482
$HOI(aq) + H_3O^+(aq) + e^- \rightarrow 1/2I_2(s) + 2H_2O(l)$	+1.430
$RuO_4(aq) + 6H_3O^+(aq) + 4e^- \rightarrow Ru(OH)_2^{2+}(aq) + 8H_2O(l)$	+1.40
$2ClO_4^-(aq) + 16H_3O^+(aq) + 14e^- \rightarrow Cl_2(g) + 24H_2O(l)$	+1.39
$ClO_4^-(aq) + 8H_3O^+(aq) + 8e^- \rightarrow Cl^-(aq) + 12H_2O(l)$	+1.389

$Cl_2(g) + 2e^- \rightarrow 2Cl^-(aq)$	+1.36
$ClO_4^-(aq) + 6H_3O^+(aq) + 6e^- \rightarrow ClO^-(aq) + 9H_2O(l)$	+1.36
$HBrO(aq) + H_3O^+(aq) + 2e^- \rightarrow Br^- + 2H_2O(l)$	+1.331
$IO_4^-(aq) + 8H_3O^+(aq) + 7e^- \rightarrow 1/2I_2(s) + 12H_2O(l)$	+1.318
$ClO_2(aq) + H_3O^+(aq) + e^- \rightarrow HClO_2(aq) + H_2O(l)$	+1.277
$Zn(OH)_2(s) + 2e^- \rightarrow Zn(s) + 2OH^-(aq)$	+1.249
$Cr_2O_7^{2-}(aq) + 14H_3O^+(aq) + 6e^- \rightarrow 2Cr^{3+}(aq) + 21H_2O(l)$	+1.232
$O_2(g) + 4H^+(aq) + 4e^- \rightarrow 2H_2O(l)$	+1.23
$MnO_2(s) + 4H_3O^+(aq) + 2e^- \rightarrow Mn^{2+}(aq) + 6H_2O(l)$	+1.224
$ClO_3^-(aq) + 3H_3O^+(aq) + 2e^- \rightarrow HClO_2(aq) + 4H_2O(l)$	+1.214
$2IO_3^-(aq) + 12H_3O^+(aq) + 10e^- \rightarrow I_2(s) + 18H_2O(l)$	+1.195
$ClO_4^-(aq) + 2H_3O+(aq) + 2e^- \rightarrow ClO_3^-(aq) + 3H_2O(l)$	+1.189
$Pt^{2+}(aq) + 2e^- \rightarrow Pt(s)$	+1.18
$IO_3^-(aq) + 5H_3O^+(aq) + 4e^- \rightarrow HOI(aq) + 7H_2O(l)$	+1.154
$ClO_3^-(aq) + 2H_3O^+(aq) + e^- \rightarrow ClO_2(aq) + 3H_2O(l)$	+1.152
$Br_2(aq) + 2e^- \rightarrow 2Br^-(aq)$	+1.0873
$Br_2(l) + 2e^- \rightarrow 2Br^-(aq)$	+1.07
$RuO_4(aq) + 8H_3O^+(aq) + 8e^- \rightarrow Ru(s) + 12H_2O(l)$	+1.04
$NO_2(g) + 2H_3O^+(aq) + 2e^- \rightarrow NO(g) + 3H_2O(l)$	+1.03
$RuO_4(aq) + e^- \rightarrow RuO_4^-(aq)$	+1.00
$NO_3^-(aq) + 4H_3O^+(aq) + 3e^- \rightarrow NO(g) + 6H_2O(l)$	+0.957
$2Hg^{2+}(aq) + 2e^- \rightarrow Hg_2^{2+}(aq)$	+0.920
$Ru(OH)_2^{2+}(aq) + 2H_3O^+(aq) + e^- \rightarrow Ru^{3+}(aq) + 4H_2O(l)$	0.86
$Hg^{2+}(aq) + 2e^- \rightarrow Hg(l)$	+0.851
$ClO^-(aq) + H_2O(l) + 2e^- \rightarrow Cl^-(aq) + 2OH^-(aq)$	+0.81
$Ag^+(aq) + e^- \rightarrow Ag(s)$	+0.80
$Hg_2^{2+}(aq) + 2e^- \rightarrow 2Hg(l)$	+0.7973
$Fe^{3+}(aq) + e^- \rightarrow Fe^{2+}(aq)$	+0.771
$Ni(OH)_2(s) + 2e^- \rightarrow Ni(s) + 2OH^-(aq)$	+0.72
p-benzoquinone + $H_3O^+(aq) + 2e^- \rightarrow$ hydroquinone + $H_2O(l)$	+0.6992
$O_2(g) + 2H_3O^+(aq) + 2e^- \rightarrow H_2O_2(l) + 2H_2O(l)$	+0.695
$Ru(OH)_2^{2+}(aq) + 2H_3O^+(aq) + 4e^- \rightarrow Ru(s) + 4H_2O(l)$	+0.68
$MnO_4^-(aq) + 2H_2O(l) + 3e^- \rightarrow MnO_2(s) + 4OH^-(aq)$	+0.595

$I_2(s) + 2e^- \rightarrow 2I^-(aq)$	+0.54
$I_3^-(aq) + 2e^- \rightarrow 3I^-(aq)$	+0.536
$Cu^+(aq) + e^- \rightarrow Cu(s)$	+0.52
$Ru^{2+}(aq) + 2e^- \rightarrow Ru(s)$	+0.455
$O_2(g) + 2H_2O + 4e^- \rightarrow 4OH^-(aq)$	+0.401
$Fe(CN)_6^{3-}(aq) + e^- \rightarrow Fe(CN)_6^{4-}(aq)$	+0.358
$Cu^{2+}(aq) + 2e^- \rightarrow Cu(s)$	+0.34
$Hg_2Cl_2(s) + 2e^- \rightarrow 2Hg(l) + 2Cl^-(aq)$	+0.26808
$Ru^{3+}(aq) + e^- \rightarrow Ru^{2+}(aq)$	+0.249
$HAsO_2(s) + 3H_3O^+(aq) + 3e^- \rightarrow As(s) + 5H_2O$	+0.248
$AgCl(s) + e^- \rightarrow Ag(s) + Cl^-(aq)$	+0.22233
$Cu^{2+}(aq) + e^- \rightarrow Cu^+(aq)$	+0.153
$Sn^{4+}(aq) + 2e^- \rightarrow Sn^{2+}(aq)$	+0.151
$S(s) + 2H_3O^+(aq) + 2e^- \rightarrow H_2S(s) + 2H_2O(l)$	+0.14
$NO_3^-(aq) + 2H_2O(l) + 3e^- \rightarrow NO(g) + 4OH^-(aq)$	+0.109
$N_2(g) + 8H_3O^+(aq) + 6e^- \rightarrow 2NH_4^+(aq) + 8H_2O(l)$	+0.092
$S_4O_6^{2-}(aq) + 2e^- \rightarrow 2S_3O_3^{2-}(aq)$	+0.08
$AgBr(s) + e^- \rightarrow Ag(s) + Br^-(aq)$	+0.07133
$2H^+(aq) + 2e^- \rightarrow H_2(g)$	0.00
$Fe^{3+}(aq) + 3e^- \rightarrow Fe(s)$	-0.04
$[Co(NH_3)_6]^{3+}(aq) + e^- \rightarrow [Co(NH_3)_6]^{2+}(aq)$	-0.108
$Pb^{2+}(aq) + 2e^- \rightarrow Pb(s)$	−0.13
$Sn^{2+}(aq) + 2e^- \rightarrow Sn(s)$	−0.14
$O_2(g) + 2H_2O(l) + 2e^- \rightarrow H_2O_2(l) + 2OH^-(aq)$	−0.146
$AgI(s) + e^- \rightarrow Ag(s) + I^-(aq)$	−0.15224
$CO_2(g) + 2H_3O+(aq) + 2e^- \rightarrow HCO_2H(s) + 2H_2O(l)$	−0.199
$Cu(OH)_2(s) + 2e^- \rightarrow Cu(s) + 2OH^-(aq)$	−0.222
$Ni^{2+}(aq) + 2e^- \rightarrow Ni(s)$	−0.26
$Co^{2+}(aq) + 2e^- \rightarrow Co(s)$	−0.28
$PbSO_4(s) + 2e^- \rightarrow Pb(s) + SO_4^{2-}(aq)$	−0.3588
$SeO_3^{2-}(aq) + 3H_2O(l) + 4e^- \rightarrow Se + 6OH^-(aq)$	−0.366
$Cd^{2+}(aq) + 2e^- \rightarrow Cd(s)$	−0.403
$Cr^{3+}(aq) + e^- \rightarrow Cr^{2+}(aq)$	−0.407
$Fe^{2+}(aq) + 2e^- \rightarrow Fe(s)$	−0.44

$NO_2^-(g) + H_2O(l) + 3e^- \rightarrow NO(g) + 2OH^-(aq)$	−0.46
$S(s) + 2e^- \rightarrow S^{2-}(aq)$	−0.48
$2CO_2(g) + 2H_3O^+(aq) + 2e^- \rightarrow H_2C_2O_4(s) + H_2O(l)$	−0.49
$TiO_2(s) + 4H_3O^+ + 2e^- \rightarrow Ti^{2+}(aq) + 6H_2O(l)$	−0.502
$Au(CN)_2^-(aq) + e^- \rightarrow Au(s) + 2CN^-(aq)$	−0.60
$Cr^{3+}(aq) + 3e^- \rightarrow Cr(s)$	−0.74
$Zn^{2+}(aq) + 2e^- \rightarrow Zn(s)$	−0.76
$Cd(OH)_2(s) + 2e^- \rightarrow Cd(s) + 2OH-(aq)$	−0.809
$2H_2O(l) + 2e^- \rightarrow H_2(g) + 2OH^-(aq)$	−0.83
$Ti^{3+}(aq) + e^- \rightarrow Ti^{2+}(aq)$	−0.85
$H_3BO_3(s) + 3H_3O^+ + 3e^- \rightarrow B(s) + 6H_2O(l)$	−0.8698
$Cr^{2+}(aq) + 2e^- \rightarrow Cr(s)$	−0.91
$SO_4^{2-}(aq) + H_2O(l) + 2e^- \rightarrow SO_3^{2-}(aq) + 2OH^-(aq)$	−0.93
$CNO^-(aq) + H_2O(l) + 2e^- \rightarrow CN^-(aq) + 2OH^-(aq)$	−0.970
$[Zn(NH_3)_4]^{2+}(aq) + 2e^- \rightarrow Zn(s) + 4NH_3(aq)$	−1.04
$Mn^{2+}(aq) + 2e^- \rightarrow Mn(s)$	−1.185
$Cr(OH)_3(s) + 3e^- \rightarrow Cr(s) + 3OH^-(aq)$	−1.48
$Ti^{2+}(aq) + 2e^- \rightarrow Ti(s)$	−1.630
$Al^{3+}(aq) + 3e^- \rightarrow Al(s)$	−1.66
$Al(OH)_3(s) + 3e^- \rightarrow Al(s)+3OH^-(aq)$	−2.31
$Mg^{2+}(aq) + 2e^- \rightarrow Mg(s)$	−2.38
$Mg(OH)_2(s) + 2e^- \rightarrow Mg(s) + 2OH^-(aq)$	−2.69
$Na^+(aq) + e^- \rightarrow Na(s)$	−2.71
$Ca^{2+}(aq) + 2e^- \rightarrow Ca(s)$	−2.87
$Ba^{2+}(aq) + 2e^- \rightarrow Ba(s)$	−2.912
$K^+(aq) + e^- \rightarrow K(s)$	−2.931
$Ba(OH)_2(s) + 2e^- \rightarrow Ba(s) + 2OH^-(aq)$	−2.99
$Ca(OH)_2(s) + 2e^- \rightarrow Ca(s) + 2OH^-(aq)$	−3.02
$Cs^+(aq) + e^- \rightarrow Cs(s)$	−3.026
$Li^+(aq) + e^- \rightarrow Li(s)$	−3.04