

Standard Potential in Water Solution at 25°C

Acidic Solution, [H⁺] = 1 M

	$E^0_{\text{red}} \text{ (V)}$		$E^0_{\text{red}} \text{ (V)}$
$\text{Li}^+_{(\text{aq})} + \text{e}^- \rightarrow \text{Li}_{(\text{s})}$	-3.040	$\text{SO}_4^{2-}_{(\text{aq})} + 4 \text{H}^+ + 2\text{e}^- \rightarrow \text{SO}_{2(\text{g})} + 2 \text{H}_2\text{O}$	0.155
$\text{K}^+_{(\text{aq})} + \text{e}^- \rightarrow \text{K}_{(\text{s})}$	-2.936	$\text{Cu}^{2+}_{(\text{aq})} + \text{e}^- \rightarrow \text{Cu}^{1+}_{(\text{aq})}$	0.161
$\text{Ba}^{2+}_{(\text{aq})} + 2\text{e}^- \rightarrow \text{Ba}_{(\text{s})}$	-2.906	$\text{Cu}^{2+}_{(\text{aq})} + 2\text{e}^- \rightarrow \text{Cu}_{(\text{s})}$	0.339
$\text{Ca}^{2+}_{(\text{aq})} + 2\text{e}^- \rightarrow \text{Ca}_{(\text{s})}$	-2.869	$\text{Cu}^+_{(\text{aq})} + \text{e}^- \rightarrow \text{Cu}_{(\text{s})}$	0.518
$\text{Na}^+_{(\text{aq})} + \text{e}^- \rightarrow \text{Na}_{(\text{s})}$	-2.714	$\text{I}_{2(\text{s})} + 2\text{e}^- \rightarrow 2 \text{I}^-_{(\text{aq})}$	0.534
$\text{Mg}^{2+}_{(\text{aq})} + 2\text{e}^- \rightarrow \text{Mg}_{(\text{s})}$	-2.357	$\text{Fe}^{3+}_{(\text{aq})} + \text{e}^- \rightarrow \text{Fe}^{2+}_{(\text{aq})}$	0.769
$\text{Al}^{3+}_{(\text{aq})} + 3\text{e}^- \rightarrow \text{Al}_{(\text{s})}$	-1.68	$\text{Hg}_2^{2+}_{(\text{aq})} + 2\text{e}^- \rightarrow 2 \text{Hg}_{(\text{l})}$	0.796
$\text{Mn}^{2+}_{(\text{aq})} + 2\text{e}^- \rightarrow \text{Mn}_{(\text{s})}$	-1.182	$\text{Ag}^+_{(\text{aq})} + \text{e}^- \rightarrow \text{Ag}_{(\text{s})}$	0.799
$\text{Zn}^{2+}_{(\text{aq})} + 2\text{e}^- \rightarrow \text{Zn}_{(\text{s})}$	-0.762	$2 \text{Hg}^{2+}_{(\text{aq})} + 2\text{e}^- \rightarrow \text{Hg}_2^{2+}_{(\text{aq})}$	0.908
$\text{Cr}^{3+}_{(\text{aq})} + 3\text{e}^- \rightarrow \text{Cr}_{(\text{s})}$	-0.744	$\text{NO}_3^-_{(\text{aq})} + 4 \text{H}^+ + 3\text{e}^- \rightarrow \text{NO}_{(\text{g})} + 2 \text{H}_2\text{O}$	0.964
$\text{Fe}^{2+}_{(\text{aq})} + 2\text{e}^- \rightarrow \text{Fe}_{(\text{s})}$	-0.409	$\text{AuCl}_{4(\text{aq})} + 3\text{e}^- \rightarrow \text{Au}_{(\text{s})} + 4 \text{Cl}^-_{(\text{aq})}$	1.001
$\text{Cr}^{3+}_{(\text{aq})} + \text{e}^- \rightarrow \text{Cr}^{2+}_{(\text{aq})}$	-0.408	$\text{Br}_{2(\text{l})} + 2\text{e}^- \rightarrow 2 \text{Br}^-_{(\text{aq})}$	1.077
$\text{Cd}^{2+}_{(\text{aq})} + 2\text{e}^- \rightarrow \text{Cd}_{(\text{s})}$	-0.402	$\text{O}_{2(\text{g})} + 4 \text{H}^+_{(\text{aq})} + 2\text{e}^- \rightarrow 2 \text{H}_2\text{O}_{(\text{l})}$	1.229
$\text{PbSO}_{4(\text{s})} + 2\text{e}^- \rightarrow \text{Pb}_{(\text{s})} + \text{SO}_4^{2-}_{(\text{aq})}$	-0.356	$\text{MnO}_{2(\text{s})} + 4 \text{H}^+_{(\text{aq})} + 2\text{e}^- \rightarrow \text{Mn}^{2+}_{(\text{aq})} + 2 \text{H}_2\text{O}$	1.229
$\text{Tl}^+_{(\text{aq})} + \text{e}^- \rightarrow \text{Tl}_{(\text{s})}$	-0.336	$\text{Cr}_2\text{O}_7^{2-}_{(\text{aq})} + 14 \text{H}^+_{(\text{aq})} + 6\text{e}^- \rightarrow 2\text{Cr}^{3+}_{(\text{aq})} + 7 \text{H}_2\text{O}$	1.33
$\text{Co}^{2+}_{(\text{aq})} + 2\text{e}^- \rightarrow \text{Co}_{(\text{s})}$	-0.282	$\text{Cl}_{2(\text{g})} + 2\text{e}^- \rightarrow 2 \text{Cl}^-_{(\text{aq})}$	1.360
$\text{Ni}^{2+}_{(\text{aq})} + 2\text{e}^- \rightarrow \text{Ni}_{(\text{s})}$	-0.236	$\text{ClO}_3^-_{(\text{aq})} + 6 \text{H}^+ + 5\text{e}^- \rightarrow \frac{1}{2} \text{Cl}_{2(\text{g})} + 3 \text{H}_2\text{O}_{(\text{l})}$	1.458
$\text{AgI}_{(\text{s})} + \text{e}^- \rightarrow \text{Ag}_{(\text{s})} + \text{I}^-_{(\text{aq})}$	-0.152	$\text{Au}^{3+}_{(\text{aq})} + 3\text{e}^- \rightarrow \text{Au}_{(\text{s})}$	1.498
$\text{Sn}^{2+}_{(\text{aq})} + 2\text{e}^- \rightarrow \text{Sn}_{(\text{s})}$	-0.141	$\text{MnO}_4^-_{(\text{aq})} + 8 \text{H}^+ + 5\text{e}^- \rightarrow \text{Mn}^{2+}_{(\text{aq})} + 4 \text{H}_2\text{O}_{(\text{l})}$	1.512
$\text{Pb}^{2+}_{(\text{aq})} + 2\text{e}^- \rightarrow \text{Pb}_{(\text{s})}$	-0.127	$\text{PbO}_{2(\text{s})} + \text{SO}_4^{2-}_{(\text{aq})} + 4 \text{H}^+ + 2\text{e}^- \rightarrow \text{PbSO}_{4(\text{s})} + 2 \text{H}_2\text{O}$	1.687
$2 \text{H}^+_{(\text{aq})} + 2\text{e}^- \rightarrow \text{H}_{2(\text{g})}$	0.000	$\text{H}_2\text{O}_{2(\text{aq})} + 2 \text{H}^+ + 2\text{e}^- \rightarrow 2 \text{H}_2\text{O}_{(\text{l})}$	1.763
$\text{AgBr}_{(\text{s})} + \text{e}^- \rightarrow \text{Ag}_{(\text{s})} + \text{Br}^-_{(\text{aq})}$	0.073	$\text{Co}^{3+}_{(\text{aq})} + \text{e}^- \rightarrow \text{Co}^{2+}_{(\text{aq})}$	1.953
$\text{S}_{(\text{s})} + 2\text{H}^+ + 2\text{e}^- \rightarrow \text{H}_2\text{S}_{(\text{aq})}$	0.144	$\text{F}_{2(\text{g})} + 2\text{e}^- \rightarrow 2 \text{F}^-_{(\text{aq})}$	2.889
$\text{Sn}^{4+}_{(\text{aq})} + 2\text{e}^- \rightarrow \text{Sn}^{2+}_{(\text{aq})}$	0.154		

Basic Solution, [OH⁻] = 1 M

	$E^0_{\text{red}} \text{ (V)}$		$E^0_{\text{red}} \text{ (V)}$
$\text{Fe}(\text{OH})_{2(\text{s})} + 2\text{e}^- \rightarrow \text{Fe}_{(\text{s})} + 2 \text{OH}^-_{(\text{aq})}$	-0.891	$\text{NO}_3^-_{(\text{aq})} + \text{H}_2\text{O} + 2\text{e}^- \rightarrow \text{NO}_2^-_{(\text{aq})} + 2 \text{OH}^-_{(\text{aq})}$	0.004
$2 \text{H}_2\text{O}_{(\text{l})} + 2\text{e}^- \rightarrow \text{H}_{2(\text{g})} + 2 \text{OH}^-_{(\text{aq})}$	-0.828	$\text{ClO}_4^-_{(\text{aq})} + \text{H}_2\text{O} + 2\text{e}^- \rightarrow \text{ClO}_3^-_{(\text{aq})} + 2 \text{OH}^-_{(\text{aq})}$	0.394
$\text{Fe}(\text{OH})_{3(\text{s})} + 2\text{e}^- \rightarrow \text{Fe}(\text{OH})_{2(\text{s})} + 2 \text{OH}^-_{(\text{aq})}$	-0.547	$\text{O}_{2(\text{g})} + 2 \text{H}_2\text{O} + 4\text{e}^- \rightarrow 4 \text{OH}^-_{(\text{aq})}$	0.401
$\text{S}_{(\text{s})} + 2\text{e}^- \rightarrow \text{S}^{2-}_{(\text{aq})} + 2 \text{OH}^-_{(\text{aq})}$	-0.445	$\text{ClO}_3^-_{(\text{aq})} + 3\text{H}_2\text{O} + 6\text{e}^- \rightarrow \text{Cl}^-_{(\text{aq})} + 6 \text{OH}^-_{(\text{aq})}$	0.614
$\text{NO}_3^-_{(\text{aq})} + 2\text{H}_2\text{O} + 3\text{e}^- \rightarrow \text{NO}_{(\text{g})} + 4 \text{OH}^-_{(\text{aq})}$	-0.140	$\text{ClO}^-_{(\text{aq})} + \text{H}_2\text{O} + 2\text{e}^- \rightarrow \text{Cl}^-_{(\text{aq})} + 2 \text{OH}^-_{(\text{aq})}$	0.890