

Standard Aqueous Electrode Potentials at 25° C

Element	Reduction Half-Reaction	Standard Reduction Potential E ⁰ , volts
Li	$\text{Li}^+ + \text{e}^- \rightarrow \text{Li}$	-3.045
K	$\text{K}^+ + \text{e}^- \rightarrow \text{K}$	-2.925
Ca	$\text{Ca}^{2+} + 2\text{e}^- \rightarrow \text{Ca}$	-2.87
Na	$\text{Na}^+ + \text{e}^- \rightarrow \text{Na}$	-2.714
Mg	$\text{Mg}^{2+} + 2\text{e}^- \rightarrow \text{Mg}$	-2.37
Al	$\text{Al}^{3+} + 3\text{e}^- \rightarrow \text{Al}$	-1.66
Zn	$\text{Zn}^{2+} + 2\text{e}^- \rightarrow \text{Zn}$	-0.7628
Cr	$\text{Cr}^{3+} + 3\text{e}^- \rightarrow \text{Cr}$	-0.74
Fe	$\text{Fe}^{2+} + 2\text{e}^- \rightarrow \text{Fe}$	-0.44
Cd	$\text{Cd}^{2+} + 2\text{e}^- \rightarrow \text{Cd}$	-0.403
Ni	$\text{Ni}^{2+} + 2\text{e}^- \rightarrow \text{Ni}$	-0.25
Sn	$\text{Sn}^{2+} + 2\text{e}^- \rightarrow \text{Sn}$	-0.14
Pb	$\text{Pb}^{2+} + 2\text{e}^- \rightarrow \text{Pb}$	-0.126
H ₂	$2\text{H}^+ + 2\text{e}^- \rightarrow \text{H}_2$	0.000 (reference electrode)
Cu	$\text{Cu}^{2+} + 2\text{e}^- \rightarrow \text{Cu}$	+0.337
I ₂	$\text{I}_2 + 2\text{e}^- \rightarrow 2\text{I}^-$	+0.535
Hg	$\text{Hg}^{2+} + 2\text{e}^- \rightarrow \text{Hg}$	+0.789
Ag	$\text{Ag}^+ + \text{e}^- \rightarrow \text{Ag}$	+0.7994
Br ₂	$\text{Br}_2 + 2\text{e}^- \rightarrow 2\text{Br}^-$	+1.08
Cl ₂	$\text{Cl}_2 + 2\text{e}^- \rightarrow 2\text{Cl}^-$	+1.360
Au	$\text{Au}^{3+} + 3\text{e}^- \rightarrow \text{Au}$	+1.50
F ₂	$\text{F}_2 + 2\text{e}^- \rightarrow 2\text{F}^-$	+2.87

Increasing strength as oxidizing agent

Increasing strength as reducing agent

Solubility Products

Acetate	$\text{AgC}_2\text{H}_3\text{O}_2$	2×10^{-3}	Hydroxides	$\text{Al}(\text{OH})_3$	5×10^{-33}
Bromides	AgBr	1×10^{-13}		$\text{Cr}(\text{OH})_3$	1×10^{-30}
	PbBr_2	5×10^{-6}		$\text{Fe}(\text{OH})_2$	1×10^{-15}
Carbonates	BaCO_3	1×10^{-9}		$\text{Fe}(\text{OH})_3$	5×10^{-38}
	CaCO_3	5×10^{-9}		$\text{Mg}(\text{OH})_2$	1×10^{-11}
	MgCO_3	2×10^{-8}	Iodides	$\text{Zn}(\text{OH})_2$	5×10^{-17}
	PbCO_3	1×10^{-13}		AgI	1×10^{-16}
Chlorides	AgCl	1.6×10^{-10}	Sulfates	PbI_2	1×10^{-8}
	Hg_2Cl_2	1×10^{-18}		BaSO_4	1.5×10^{-9}
	PbCl_2	1.7×10^{-5}		CaSO_4	3×10^{-5}
Chromates	Ag_2CrO_4	1×10^{-12}		PbSO_4	1×10^{-8}
	BaCrO_4	2×10^{-10}	Sulfides	Ag_2S	1×10^{-49}
	PbCrO_4	2×10^{-14}		CdS	1×10^{-26}
Fluorides	BaF_2	2×10^{-6}		CoS	1×10^{-21}
	CaF_2	2×10^{-10}		CuS	1×10^{-17}
	PbF_2	4×10^{-8}		FeS	2×10^{-17}
				HgS	1×10^{-52}
				MnS	1×10^{-13}
				NiS	1×10^{-22}
				PbS	1×10^{-27}
				ZnS	1×10^{-23}