

## Potenciais de eléctrodo de redução padrão a 25 °C

Semi-equação da Reacção de eléctrodo	E° (V)
$\text{Ag}^+(\text{aq}) + \text{e}^- \rightleftharpoons \text{Ag}(\text{s})$	+0,799
$\text{AgBr}(\text{s}) + \text{e}^- \rightleftharpoons \text{Ag}(\text{s}) + \text{Br}^-(\text{aq})$	+0,095
$\text{AgCl}(\text{s}) + \text{e}^- \rightleftharpoons \text{Ag}(\text{s}) + \text{Cl}^-(\text{aq})$	+0,222
$\text{Ag}_2\text{CrO}_4(\text{s}) + 2\text{e}^- \rightleftharpoons 2\text{Ag}(\text{s}) + \text{CrO}_4^{2-}(\text{aq})$	+0,446
$\text{AgI}(\text{s}) + \text{e}^- \rightleftharpoons \text{Ag}(\text{s}) + \text{I}^-(\text{aq})$	- 0,151
$\text{Ag}_2\text{O}(\text{s}) + \text{H}_2\text{O}(\text{l}) + 2\text{e}^- \rightleftharpoons 2\text{Ag}(\text{s}) + 2\text{OH}^-(\text{aq})$	+0,342
$\text{Al}^{3+}(\text{aq}) + 3\text{e}^- \rightleftharpoons \text{Al}(\text{s})$	- 1,66
$\text{H}_3\text{AsO}_4(\text{aq}) + 2\text{H}^+(\text{aq}) + 2\text{e}^- \rightleftharpoons \text{H}_3\text{AsO}_3(\text{aq}) + \text{H}_2\text{O}(\text{l})$	+0,559
$\text{Ba}^{2+}(\text{aq}) + 2\text{e}^- \rightleftharpoons \text{Ba}(\text{s})$	- 2,90
$\text{Br}_2(\text{l}) + 2\text{e}^- \rightleftharpoons 2\text{Br}^-(\text{aq})$	+1,06
$\text{BrO}_3^-(\text{aq}) + 6\text{H}^+(\text{aq}) + 5\text{e}^- \rightleftharpoons \frac{1}{2}\text{Br}_2(\text{l}) + 3\text{H}_2\text{O}(\text{l})$	+1,52
$\text{Ca}^{2+}(\text{aq}) + 2\text{e}^- \rightleftharpoons \text{Ca}(\text{s})$	- 2,87
$2\text{CO}_2(\text{g}) + 2\text{H}^+(\text{aq}) + 2\text{e}^- \rightleftharpoons \text{H}_2\text{C}_2\text{O}_4(\text{aq})$	- 0,49
$\text{Cd}^{2+}(\text{aq}) + 2\text{e}^- \rightleftharpoons \text{Cd}(\text{s})$	- 0,403
$\text{Cd}(\text{OH})_2 + 2\text{e}^- \rightleftharpoons \text{Cd}(\text{s}) + 2\text{OH}^-(\text{aq})$	- 0,83
$\text{Ce}^{4+}(\text{aq}) + \text{e}^- \rightleftharpoons \text{Ce}^{3+}(\text{aq})$	+1,61
$\text{Cl}_2(\text{g}) + 2\text{e}^- \rightleftharpoons 2\text{Cl}^-(\text{aq})$	+1,36
$\text{HClO}(\text{aq}) + \text{H}^+(\text{aq}) + 2\text{e}^- \rightleftharpoons \text{Cl}^-(\text{aq}) + \text{H}_2\text{O}(\text{l})$	+1,63
$\text{ClO}^-(\text{aq}) + \text{H}_2\text{O}(\text{l}) + 2\text{e}^- \rightleftharpoons \text{Cl}^-(\text{aq}) + 2\text{OH}^-(\text{aq})$	+0,89
$\text{ClO}_3^-(\text{aq}) + 6\text{H}^+(\text{aq}) + 5\text{e}^- \rightleftharpoons \frac{1}{2}\text{Cl}_2 + 3\text{H}_2\text{O}(\text{l})$	+1,47
$\text{Co}^{2+}(\text{aq}) + 2\text{e}^- \rightleftharpoons \text{Co}(\text{s})$	- 0,28
$\text{Co}^{3+}(\text{aq}) + \text{e}^- \rightleftharpoons \text{Co}^{2+}(\text{aq})$	+1,83
Semi-equação da Reacção de eléctrodo	E° (V)
$\text{Cr}^{3+}(\text{aq}) + \text{e}^- \rightleftharpoons \text{Cr}^{2+}(\text{aq})$	-0,41

$\text{Cr}^{2+}(\text{aq}) + 2\text{e}^{-} \rightleftharpoons \text{Cr}(\text{s})$	-0,91
$\text{Cr}_2\text{O}_7^{2-}(\text{aq}) + 14\text{H}^{+}(\text{aq}) + 6\text{e}^{-} \rightleftharpoons 2\text{Cr}^{3+}(\text{aq}) + 7\text{H}_2\text{O}(\text{l})$	+1,33
$\text{CrO}_4^{2-}(\text{aq}) + 4\text{H}_2\text{O}(\text{l}) + 3\text{e}^{-} \rightleftharpoons \text{Cr}(\text{OH})_3(\text{s}) + 5\text{OH}^{-}(\text{aq})$	-0,13
$\text{Cu}^{2+}(\text{aq}) + 2\text{e}^{-} \rightleftharpoons \text{Cu}(\text{s})$	+0,34
$\text{Cu}^{2+}(\text{aq}) + \text{e}^{-} \rightleftharpoons \text{Cu}^{+}(\text{aq})$	+0,153
$\text{Cu}^{+}(\text{aq}) + \text{e}^{-} \rightleftharpoons \text{Cu}(\text{s})$	+0,521
$\text{F}_2(\text{g}) + 2\text{e}^{-} \rightleftharpoons 2\text{F}^{-}(\text{aq})$	+2,87
$\text{Fe}^{2+}(\text{aq}) + 2\text{e}^{-} \rightleftharpoons \text{Fe}(\text{s})$	-0,44
$\text{Fe}^{3+}(\text{aq}) + \text{e}^{-} \rightleftharpoons \text{Fe}^{2+}(\text{aq})$	+0,771
$\text{Fe}(\text{CN})_6^{3-}(\text{aq}) + \text{e}^{-} \rightleftharpoons \text{Fe}(\text{CN})_6^{4-}(\text{aq})$	+0,358
$2\text{H}^{+}(\text{aq}) + 2\text{e}^{-} \rightleftharpoons \text{H}_2(\text{g})$	0,000
$\text{H}_2(\text{g}) + 2\text{e}^{-} \rightleftharpoons 2\text{H}^{-}(\text{aq})$	-2,23
$2\text{H}_2\text{O}(\text{l}) + 2\text{e}^{-} \rightleftharpoons \text{H}_2(\text{g}) + 2\text{OH}^{-}(\text{aq})$	-0,83
$\text{HO}_2^{-}(\text{aq}) + \text{H}_2\text{O}(\text{l}) + 2\text{e}^{-} \rightleftharpoons 3\text{OH}^{-}(\text{aq})$	+0,88
$\text{H}_2\text{O}_2(\text{aq}) + 2\text{H}^{+}(\text{aq}) + 2\text{e}^{-} \rightleftharpoons 2\text{H}_2\text{O}(\text{l})$	+ 1,776
$\text{Hg}^{2+}(\text{aq}) + 2\text{e}^{-} \rightleftharpoons \text{Hg}(\text{l})$	+0,85
$2\text{Hg}^{2+}(\text{aq}) + 2\text{e}^{-} \rightleftharpoons \text{Hg}_2^{2+}(\text{aq})$	+0,92
$\text{I}_2(\text{s}) + 2\text{e}^{-} \rightleftharpoons 2\text{I}^{-}(\text{aq})$	+0,54
$\text{IO}_3^{-}(\text{aq}) + 6\text{H}^{+}(\text{aq}) + 5\text{e}^{-} \rightleftharpoons \frac{1}{2}\text{I}_2(\text{aq}) + 3\text{H}_2\text{O}(\text{l})$	+ 1,195
$\text{K}^{+}(\text{aq}) + \text{e}^{-} \rightleftharpoons \text{K}(\text{s})$	-2,93
$\text{Li}^{+}(\text{aq}) + \text{e}^{-} \rightleftharpoons \text{Li}(\text{s})$	-3,04
$\text{Mg}^{2+}(\text{aq}) + 2\text{e}^{-} \rightleftharpoons \text{Mg}(\text{s})$	-2,37
Semi-equação da Reacção de eléctrodo	$E^{\circ}(\text{V})$
$\text{Mn}^{2+}(\text{aq}) + 2\text{e}^{-} \rightleftharpoons \text{Mn}(\text{s})$	-1,18
$\text{MnO}_4^{-}(\text{aq}) + 8\text{H}^{+}(\text{aq}) + 5\text{e}^{-} \rightleftharpoons \text{Mn}^{2+}(\text{aq}) + 4\text{H}_2\text{O}(\text{l})$	+1,51
$\text{MnO}_4^{-}(\text{aq}) + 2\text{H}_2\text{O}(\text{l}) + 3\text{e}^{-} \rightleftharpoons \text{MnO}_2(\text{s}) + 4\text{OH}^{-}(\text{aq})$	+0,59

$\text{HNO}_2 (\text{aq}) + \text{H}^+ (\text{aq}) + \text{e}^- \rightleftharpoons \text{NO} (\text{g}) + \text{H}_2\text{O} (\text{l})$	+0,983
$\text{N}_2 (\text{g}) + 2\text{H}_2\text{O} (\text{l}) + 4\text{H}^+ (\text{aq}) + 2\text{e}^- \rightleftharpoons 2\text{NH}_3\text{OH}^+ (\text{aq})$	-1,87
$\text{N}_2 (\text{g}) + 4\text{H}_2\text{O} (\text{l}) + 2\text{e}^- \rightleftharpoons 2\text{NH}_2\text{OH} (\text{aq}) + 2\text{OH}^- (\text{aq})$	-3,17
$\text{NO}_3^- (\text{aq}) + 4\text{H}^+ (\text{aq}) + 3\text{e}^- \rightleftharpoons \text{NO} (\text{g}) + 2\text{H}_2\text{O} (\text{l})$	+0,96
$\text{Na}^+ (\text{aq}) + \text{e}^- \rightleftharpoons \text{Na} (\text{s})$	-2,71
$\text{Ni}^{2+} (\text{aq}) + 2\text{e}^- \rightleftharpoons \text{Ni} (\text{s})$	-0,25
$\text{NiO}(\text{OH}) (\text{s}) + \text{H}_2\text{O}(\text{l}) + \text{e}^- \rightleftharpoons \text{Ni}(\text{OH})_2 (\text{s}) + \text{OH}^- (\text{aq})$	+0,52
$\text{O}_2 (\text{g}) + 2 \text{H}_2\text{O} (\text{l}) + 4\text{e}^- \rightleftharpoons 4 \text{OH}^- (\text{aq})$	+0,40
$\text{O}_2 (\text{g}) + 4\text{H}^+ (\text{aq}) + 4\text{e}^- \rightleftharpoons 2\text{H}_2\text{O} (\text{l})$	+1,23
$\text{O}_2 (\text{g}) + 2\text{H}^+ (\text{aq}) + 2\text{e}^- \rightleftharpoons \text{H}_2\text{O}_2 (\text{aq})$	+0,68
$\text{Pb}^{2+} (\text{aq}) + 2\text{e}^- \rightleftharpoons \text{Pb} (\text{s})$	-0,126
$\text{PbSO}_4 (\text{s}) + \text{H}^+ (\text{aq}) + 2\text{e}^- \rightleftharpoons \text{Pb} (\text{s}) + \text{HSO}_4^- (\text{aq})$	-0,356
$\text{PbO}_2 (\text{s}) + \text{HSO}_4^- (\text{aq}) + 3\text{H}^+ (\text{aq}) + 2\text{e}^- \rightleftharpoons \text{PbSO}_4 (\text{s}) + 2\text{H}_2\text{O} (\text{l})$	+1,685
$\text{S} (\text{s}) + 2\text{H}^+ (\text{aq}) + 2\text{e}^- \rightleftharpoons \text{H}_2\text{S} (\text{g})$	+0,14
$\text{H}_2\text{SO}_3 (\text{aq}) + 4\text{H}^+ (\text{aq}) + 4\text{e}^- \rightleftharpoons \text{S} (\text{s}) + 3\text{H}_2\text{O} (\text{l})$	+0,45
$\text{HSO}_4^- (\text{aq}) + 3\text{H}^+ (\text{aq}) + 2\text{e}^- \rightleftharpoons \text{H}_2\text{SO}_3 (\text{aq}) + \text{H}_2\text{O} (\text{l})$	+0,17
$\text{Sn}^{2+} (\text{aq}) + 2\text{e}^- \rightleftharpoons \text{Sn} (\text{s})$	-0,14
$\text{Sn}^{4+} (\text{aq}) + 2\text{e}^- \rightleftharpoons \text{Sn}^{2+} (\text{aq})$	+0,15
$\text{VO}_2^+ (\text{aq}) + 2\text{H}^+ (\text{aq}) + \text{e}^- \rightleftharpoons \text{VO}^{2+} (\text{aq}) + \text{H}_2\text{O} (\text{l})$	+1,00
$\text{Zn}^{2+} (\text{aq}) + 2\text{e}^- \rightleftharpoons \text{Zn} (\text{s})$	-0,76
Semi-equação da Reacção de eléctrodo	$E^\circ (\text{V})$
$\text{Zn}(\text{OH})_2 (\text{s}) + 2\text{e}^- \rightleftharpoons \text{Zn} (\text{s}) + 2\text{OH}^- (\text{aq})$	-1,25