

Chromium(II)

The divalent state is unstable in water, producing hydrogen whilst being oxidised to a higher valency state (Baes and Mesmer, 1976). The reliability of the data is in doubt.

Reaction	NIST46	Ball and Nordstrom, 1988
$\text{Cr}^{2+} + \text{H}_2\text{O} = \text{CrOH}^+ + \text{H}^+$	-5.5	
$\text{Cr}(\text{OH})_2(\text{s}) = \text{Cr}^{2+} + 2 \text{OH}^-$		-17 ± 0.02

J.W. Ball and D.K. Nordstrom, Critical evaluation and selection of standard state thermodynamic properties for chromium metal and its aqueous ions, hydrolysis species, oxides and hydroxides. *J. Chem. Eng. Data*, 43, 895–918 (1998)

NIST46, NIST Critically Selected Stability Constants of Metal Complexes: Version 8.0. Available at: www.nist.gov/srd/nist46