

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