

Gallium

Reaction	Baes and Mesmer, 1976	Smith et. al., 2003	Brown and Ekberg, 2016
$\text{Ga}^{3+} + \text{H}_2\text{O} = \text{Ga}(\text{OH})^{2+} + \text{H}^+$	-2.6	-2.897	-2.74
$\text{Ga}^{3+} + 2 \text{H}_2\text{O} = \text{Ga}(\text{OH})_2^+ + 2 \text{H}^+$	-5.9	-6.694	-7.0
$\text{Ga}^{3+} + 3 \text{H}_2\text{O} = \text{Ga}(\text{OH})_3 + 3 \text{H}^+$	-10.3		-11.96
$\text{Ga}^{3+} + 4 \text{H}_2\text{O} = \text{Ga}(\text{OH})_4^- + 4 \text{H}^+$	-16.6	-16.588	-15.52
$\text{Ga}(\text{OH})_3(\text{s}) = \text{Ga}^{3+} + 3 \text{OH}^-$	≈ -37	-37.0	
$\text{GaO}(\text{OH})(\text{s}) + \text{H}_2\text{O} = \text{Ga}^{3+} + 3 \text{OH}^-$	-39.06	-39.1	-40.51

C.F. Baes and R.E. Mesmer, The Hydrolysis of Cations. Wiley, New York, 1976.

P.L. Brown and C. Ekberg, Hydrolysis of Metal Ions. Wiley, 2016, pp. 135–145.

R.M. Smith, A.E. Martell and R.J. Motekaitis, NIST Critically Selected Stability Constants of Metal Complexes Database, Version 7.0, NIST Standard Reference Database 46. National Institute of Standards, U.S. Dept. of Commerce, Gaithersburg, MD, USA, 2003.