
 Equilibrium constants for hydrolysis and associated equilibria in critical compilations

Mercury(I)

Equilibrium reaction	lgK at infinite dilution and T = 298 K	
	Baes and Mesmer, 1976	Brown and Ekberg, 2016
$\text{Hg}_2^{2+} + \text{H}_2\text{O} \rightleftharpoons \text{Hg}_2\text{OH}^+ + \text{H}^+$	-5.0 ^a	-4.45 ± 0.10

^a0.5 M HClO₄

C.C.F. Baes and R.E. Mesmer, The Hydrolysis of Cations. Wiley, New York, 1976, p. 302.

P.L. Brown and C. Ekberg, Hydrolysis of Metal Ions. Wiley, 2016, pp. 741-755.

Distribution diagrams

These diagrams have been computed at two Hg(I) concentrations (1 mM = 1×10^{-3} mol L⁻¹ and 1 µM = 1×10^{-6} mol L⁻¹) with the ‘best’ equilibrium constant above (in green). Calculations assume $T = 298$ K for the limiting case of zero ionic strength (*i.e.*, even neglecting plotted ions).

