

Mercury(I)

Reaction	Baes and Mesmer, 1976	Brown and Ekberg, 2016
$\text{Hg}_2^{2+} + \text{H}_2\text{O} \rightleftharpoons \text{Hg}_2\text{OH}^+ + \text{H}^+$	-3.33	-4.45 ± 0.10

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. 741-755.

Mercury(II)

Reaction	Baes and Mesmer, 1976	Powell et al., 2005	Brown and Ekberg, 2016
$\text{Hg}^{2+} + \text{H}_2\text{O} \rightleftharpoons \text{HgOH}^+ + \text{H}^+$	-3.40	-3.40 ± 0.08	-3.40 ± 0.08
$\text{Hg}^{2+} + 2 \text{H}_2\text{O} \rightleftharpoons \text{Hg}(\text{OH})_2 + \text{H}^+$	-6.17	-5.98 ± 0.06	-5.96 ± 0.07
$\text{Hg}^{2+} + 3 \text{H}_2\text{O} \rightleftharpoons \text{Hg}(\text{OH})_3^- + 3 \text{H}^+$	-21.1	-21.1 ± 0.3	
$\text{HgO}(\text{s}) + 2 \text{H}^+ \rightleftharpoons \text{Hg}^{2+} + \text{H}_2\text{O}$		2.37 ± 0.08	2.37 ± 0.08

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. 741-755.

K.J. Powell, P.L. Brown, R.H. Byrne, T. Gajda, G. Hefter, S. Sjöberg, H. Wanner, Chemical speciation of environmentally significant heavy metals with inorganic ligands. Part 1: the Hg^{2+} – Cl^- , OH^- , CO_3^{2-} , SO_4^{2-} , and PO_4^{3-} aqueous systems (IUPAC technical report). Pure Appl. Chem. 77, 739–800 (2005).