Kamila Stokowa-Sołtys

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Mercury(II)

Reaction	Baes and Mesmer, 1976	Powell et al., 2005	Brown and Ekberg, 2016
$Hg_2^{2+} + H_2O \rightleftharpoons Hg_2OH^+ + H^+$	−3.33		−4.45 ± 0.10
$Hg^{2+} + H_2O \rightleftharpoons HgOH^+ + H^+$	−3.40	–3.40 ± 0.08	−3.40 ± 0.08
$Hg^{2+} + 2\ H_2O \rightleftharpoons Hg(OH)_2 + H^+$	-6.17	–5.98 ± 0.06	−5.96 ± 0.07
$Hg^{2+} + 3\ H_2O \rightleftharpoons Hg(OH)_3^- + 3\ H^+$	–21.1	–21.1 ± 0.3	
$HgO(s) + 2\ H^+ \rightleftharpoons Hg^{2+} + H_2O$		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).