



Veronika Zinovyeva 30 November 2021

Holmium

Reaction	Baes and Mesmer, 1976	Brown and Ekberg, 2016
$\text{Ho}^{3+} + \text{H}_2\text{O} \rightleftharpoons \text{HoOH}^{2+} + \text{H}^+$	-8.0	-7.43 ± 0.05
$2 \text{ Ho}^{3+} + 2 \text{ H}_2\text{O} \rightleftharpoons \text{Ho}_2(\text{OH})_2^{4+} + 2 \text{ H}^+$		-13.5 ± 0.2
$3 \text{ Ho}^{3+} + 5 \text{ H}_2\text{O} \rightleftharpoons \text{Ho}_3(\text{OH})_5^{4+} + 5 \text{ H}^+$		-30.9 ± 0.3
$\text{Ho}(\text{OH})_3(\text{s}) + 3 \text{ H}^+ \rightleftharpoons \text{Ho}^{3+} + 3 \text{ H}_2\text{O}$	15.4	15.60 ± 0.30

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. 247, 250–251 and 293–295.