Vladimir Sladkov

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Yttrium

Reaction	Baes and Mesmer, 1976	Brown and Ekberg, 2016
$Y^{3+} + H_2O \rightleftharpoons YOH^{2+} + H^+$	−7.7	−7.77 ± 0.06
$Y^{3+} + 2\ H_2O \rightleftharpoons Y(OH)_2^+ + 2\ H^+$	(−16.4)*	
$Y^{3+} + 3\ H_2O \rightleftharpoons Y(OH)_3 + 3\ H^+$	(−26.0)*	
$Y^{3+} + 4\ H_2O \rightleftharpoons Y(OH)_4^- + 4\ H^+$	(−36.5)*	
$2\ Y^{3+} + 2\ H_2O \rightleftharpoons Y_2(OH)_2^{4+} + 2\ H^+$	−14.23	−14.1 ± 0.2
$3\ Y^{3+} + 5\ H_2O \rightleftharpoons Y_3(OH)_5^{4+} + 5\ H^+$	−31.6	−32.7 ± 0.3

$Y(OH)_3(s) + 3H^+ \rightleftharpoons Y^{3+} + 3 H_2O$	(17.5)*	17.32 ± 0.30
$Y(OH)_3(c) + OH^- \rightleftharpoons Y(OH)_4^-$	(−5.0 ± 0.5)*	
$Y(OH)_3(c) \rightleftharpoons Y(OH)_3(aq)$	(−8.5)*	

*Estimation.

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.