Author: montserrat.filella@unige.ch
Last update: 03/12/2024
Source: Compilation COST Action 1802

Equilibrium constants for hydrolysis and associated equilibria in critical compilations

Berkelium(III)

Equilibrium reaction	lg*K* at infinite dilution and *T* = 298 K
	Brown and Ekberg, 2016
$Bk^{3+} + 3\ H_2O \rightleftharpoons Bk(OH)_3(s) + 3\ H^+$	–13.5 ± 1.0

P.L. Brown and C. Ekberg, Hydrolysis of Metal Ions. Wiley, 2016, pp. 419–422.

Distribution diagrams

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