



Equilibrium constants for hydrolysis and associated equilibria in critical compilations

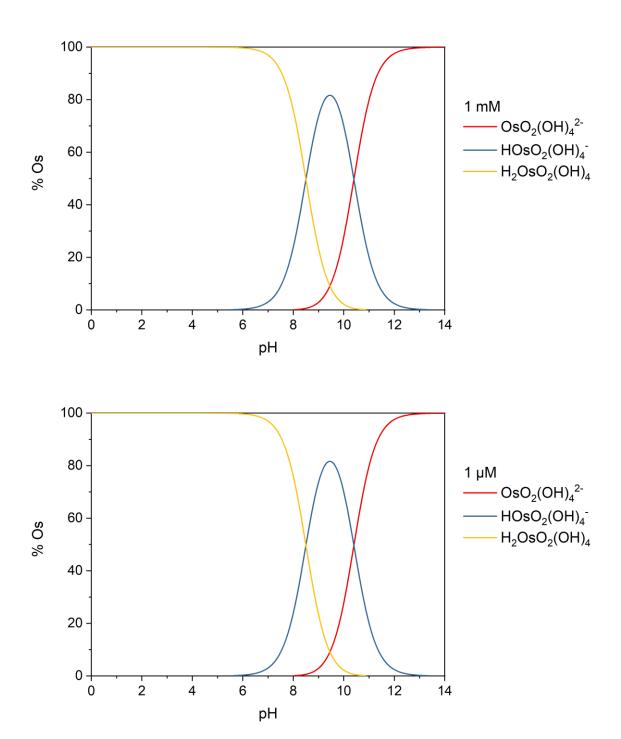
Osmium(VI)

Equilibrium reactions	lgK at I = 0.1 M and T = 298 K	
	Galbács et al., 1983	
$OsO_2(OH)_4^{2-} + H^+ \rightleftharpoons HOsO_2(OH)_4^-$	10.4	
$HOsO_2(OH)_4^- + H^+ \rightleftharpoons H_2OsO_2(OH)_4$	8.5	

Z.M. Galbács, Á. Zsednai and L.J. Csányi, The acidic behaviour of osmium(VIII) and osmium(VI). Transition Met. Chem. 8, 328–332 (1983). doi:10.1007/BF00618563

Distribution diagrams

These diagrams have been computed at two Os(VI) concentrations (1 mM = $1x10^{-3}$ mol L⁻¹ and 1 μ M = $1x10^{-6}$ mol L⁻¹) with the equilibrium constants above. Calculations assume T = 298 K for the limiting case of zero ionic strength (*i.e.*, even neglecting plotted ions).







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Osmium(VIII)

Equilibrium reactions	lgK at I = 0.1 M and T = 298 K	lgK at I = 2.5 M and T = 298 K
	Galbács et al., 1983	Galbács et al., 1983
$OsO_2(OH)_3(O^-)aq + H^+ \rightleftharpoons OsO_2(OH)_4aq$	12.2	
$OsO_2(OH)_2(O^-)_2aq + H^+ \rightleftharpoons OsO_2(OH)_3(O^-)aq$		14.4

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