

---

 Equilibrium constants for hydrolysis and associated equilibria in critical compilations
 

---

## Vanadium(IV)

Equilibrium reactions	IgK at infinite dilution and T = 298 K
	Brown and Ekberg, 2016
$\text{VO}^{2+} + \text{H}_2\text{O} \rightleftharpoons \text{VO(OH)}^+ + \text{H}^+$	$-5.30 \pm 0.13$
$2 \text{VO}^{2+} + 2 \text{H}_2\text{O} \rightleftharpoons (\text{VO})_2(\text{OH})_2^{2+} + 2 \text{H}^+$	$-6.71 \pm 0.10$

P.L. Brown and C. Ekberg, Hydrolysis of Metal Ions. Wiley, 2016, pp. 568–570.

# Distribution diagrams

These diagrams have been computed at two V(IV) concentrations (1 mM =  $1 \times 10^{-3}$  mol L<sup>-1</sup> and 1 µM =  $1 \times 10^{-6}$  mol L<sup>-1</sup>) with the ‘best’ equilibrium constants above. Calculations assume  $T = 298$  K for the limiting case of zero ionic strength (*i.e.*, even neglecting plotted ions).

