
Equilibrium constants for hydrolysis and associated equilibria in critical compilations

Californium(III)

| Equilibrium reaction | lgK at infinite dilution and $T = 298\text{ K}$ |
|---|--|
| | Brown and Ekberg, 2016 |
| $\text{Cf}^{3+} + 3\text{ H}_2\text{O} \rightleftharpoons \text{Cf}(\text{OH})_3 (\text{s}) + 3\text{ H}^+$ | -13.0 ± 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 Cf(III) concentrations ($1 \text{ mM} = 1 \times 10^{-3} \text{ mol L}^{-1}$ and $1 \text{ }\mu\text{M} = 1 \times 10^{-6} \text{ mol L}^{-1}$) with the 'best' equilibrium constant above. Calculations assume $T = 298 \text{ K}$ for the limiting case of zero ionic strength (*i.e.*, even neglecting plotted ions).

