



Montserrat Filella 31 May 2021

## Beryllium

Reaction	Baes and Mesmer, 1976
$Be^{2+} + H_2O \rightleftharpoons BeOH^+ + H^+$	-5.40
$Be^{2+} + 2 H_2O \rightleftharpoons Be(OH)_2 + 2 H^+$	-23.65
$Be^{2+} + 3 H_2O \rightleftharpoons Be(OH)_3^- + 3 H^+$	-23.25
$Be^{2+} + 4 H_2O \rightleftharpoons Be(OH)_4^{2-} + 4 H^+$	-37.42
$2 Be^{2+} + H_2O \rightleftharpoons Be_2OH^{3+} + H^+$	-3.97
$3 \text{ Be}^{2+} + 3 \text{ H}_2\text{O} \rightleftharpoons \text{Be}_3(\text{OH})_3^{3+} + 3 \text{ H}^+$	-8.92
$6 \text{ Be}^{2+} + 8 \text{ H}_2\text{O} \rightleftharpoons \text{Be}_6(\text{OH})_8^{4+} + 8 \text{ H}^+$	-27.2
$\alpha$ -Be(OH) <sub>2</sub> (cr) + 2 H <sup>+</sup> $\rightleftharpoons$ Be <sup>2+</sup> + 2 H <sub>2</sub> O	6.69

C.F. Baes and R.E. Mesmer, The Hydrolysis of Cations. Wiley, New York, 1976.