

No.	Compound name	Reaction equation	pH	Rate constant (L mol <sup>-1</sup> s <sup>-1</sup> )	Comments	Reference
200	Decaammine(dinitrogen)diruthenium(II) Ion	$  \begin{array}{c}  \text{OH}^- + [\text{Ru}(\text{NH}_3)_5]_2\text{N}_2^{4+} \\  \longrightarrow (\text{NH}_3)_5\text{RuN}_2\text{Ru}(\text{NH}_3)_5\text{OH}^{4+}  \end{array}  $	6.8	$2.4 \times 10^{10}$	p.r.; P.b.k. at 435 nm in soln. contg. $10^{-4}$ L <sup>-1</sup> substrate; similar value obtained by d. at 262 nm (substrate); subsequent decay and hydrolysis give Ru(NH <sub>3</sub> ) <sub>5</sub> N <sub>2</sub> <sup>2+</sup> and Ru(NH <sub>3</sub> ) <sub>5</sub> OH <sup>2+</sup> .	82A135