No.	Compound name	Reaction equation	pH	Rate constant ($L\,mol^{-1}\,s^{-1}$)	Comments
5.1	Dibromine radical ion	$Br_2^{\bullet -} + e_{aq}^- \longrightarrow 2\,Br^-$	7	1.3×10^{10}	p.r.; Calcd. from d.k. at 365 nm ($Br_2^{\bullet -}$ contains 10^{-4}-10^{-2} mol L^{-1} KBr; assumed $Br_2) = k(e_{aq}^- + Br_3^-) = 1 \times 10^{10}$.
5.2		Dibromine radical ion	$Br_2^{\bullet -} + H^{\bullet} \longrightarrow H^+ + 2\,Br^-$	2	7×10^9