

No.	Compound name	Reaction equation	pH	Rate constant (L mol ⁻¹ s ⁻¹)	Comments	Reference
630	Benzoate Ion	$\text{e}_{\text{aq}}^- + \text{C}_6\text{H}_5\text{CO}_2^- \longrightarrow \text{C}_6\text{H}_5\text{CO}_2^{\bullet-}$	9-11.5	3.0×10^9	Average of 3 values. p.r.; D.k. at 720 nm in Ar-satd. soln. contg. 0.1 mol L ⁻¹ tert-BuOH and 10 ⁻⁴ -10 ⁻² mol L ⁻¹ benzoate.	85A158
			7.2-7.7	3.1×10^9	p.r.; D.k.; at pH 5.35-5.45 and 12.3 $k = 5.4 \times 10^9$ and 2.8×10^9 (cor.), resp.	650018
			7	3.5×10^9	p.r.; D.k.; at pH 11, 14 and 3 mol L ⁻¹ OH ⁻ $k = 3.1 \times 10^9$, 2.9×10^9 and 2.4×10^9 , resp.	650047