

No.	Compound name	Reaction equation	pH	Rate constant (L mol ⁻¹ s ⁻¹)	Comments	Reference
622	Benzene	$\text{e}_{\text{aq}}^- + \text{PhH} \longrightarrow [\text{C}_6\text{H}_6]^-$	9-11.5	9.0×10^6	p.r.; D.k. at 720 nm in Ar-satd. soln. contg. 0.1 mol L ⁻¹ tert-BuOH and 10 ⁻¹ -10 ⁻² mol L ⁻¹ benzene.	85A158
			11	7.2×10^6	p.r.; D.k. at 600 nm in soln. contg. 2 mol L ⁻¹ tert-BuOH; $k = 9.0 \times 10^6$ in soln. without tert-BuOH.	771012
			11, 13	1.3×10^7	p.r.; D.k. at 600 nm in Ar-satd. soln. contg. 0.8 or 2 mol L ⁻¹ tert-BuOH or 0.6 mol L ⁻¹ isobutanol.	741090
				1.3×10^7	p.r.; D.k. at 600 nm; also reported k in micellar solutions; $k = 1.1 \times 10^8$ in CTAB, 4×10^6 in SDS, 6×10^6 in Igepal CO-730.	710586