

No.	Compound name	Reaction equation	pH	Rate constant (L mol ⁻¹ s ⁻¹)	Comments	Reference
190	Acrylonitrile	$\text{H}^\bullet + \text{H}_2\text{C}=\text{CHCN} \longrightarrow \text{CH}_3\dot{\text{C}}\text{HCN}$	1	2.2×10^{9b}	p.r.; esr; Calcd. from time profile of H in deaerated soln. contg. various solute concns. and 10 ⁻² mol L ⁻¹ tert-BuOH.	83A153
			~ 1	3.9×10^{9b}	p.r.; C.k.; soln. cont. 0.05 mol L ⁻¹ HClO ₄ ; product identified by opt. and esr spectra; rel. to $k(\text{H}^\bullet + \text{Fe}(\text{CN})_6^{3-})$.	79A144