

No.	Compound name	Reaction equation	pH	Rate constant (L mol ⁻¹ s ⁻¹)
3.2	O_2^-	O ₂ ⁻ + ·OH → HO ₂ ⁻	>12	≤ 2 × 10 ¹⁰
3.3	O_2^·-	O ₂ ⁻ + ·OH → OH ⁻ + O ₂	7	7 × 10 ⁹
3.4	HO_2^·	2.74–6.75 HO ₂ [•] + ·OH → H ₂ O + O ₂	9.4 × 10 ⁹ 0.46–6.75	p.r.; Obs. G(H ₂ O ₂); data fitting; pK(HO ₂ ; H ⁺ + O ₂ ⁻) = 4.45; rel. to k(·OH + ·OH). 6.6 × 10 ⁹
3.5	H_2O_2^+·	>2 H ₂ O ₂ ⁺ + ·OH → H ₃ O ⁺ + O ₂	6 × 10 ⁹ 0.46–1.51	p.r.; Calcd. from obs. G(H ₂ O ₂).; rel. to k(·OH + ·OH). 1.2 × 10 ¹⁰