No.	Compound name	Reaction equation	pH	Rate constant ($L\,mol^{-1}\,s^{-1}$)	Comments	Reference
160	Hydroperoxide Ion	$.OH + HO_2^- \longrightarrow O_2^{\bullet -} + H_2O$		7.5×10^9	p.r.; P.b.k. (O_2^-) at 250-270 nm from pH dependence (6.8-13.8). Assumes equilibrium between OH and O^- is maintained; best value.	82A096
			7.7-11	6.8×10^9	p.r.; Calcd. from c.k. with luminol, $pK(H_2O_2)$ = 11.65.; rel. to k(.OH + luminol).	80A221
			11	5.6×10^9	p.r.; C.k.; calcd. from $1.4k + k(O^- + H_2O_2) = 8 \times 10^9$, $pK(H_2O_2)$ = 11.75 and pK(.OH) = 11.9. Assumes equilibrium between .OH and $.O^-$ is maintained; rel. to $k(.OH + {CO_3}^{2-})$.	690379
			13	8.3×10^9	p.r.; P.b.k. at 260 nm; pH study; assumes equilibrium between .OH and $.O^-$ is maintained.	680298