No.	Compound name	Reaction equation	pH	Rate constant ($L\,mol^{-1}\,s^{-1}$)	Comments	Reference
159	Hydrogen peroxide	$.OH + H_2O_2 \longrightarrow O_2^{\bullet -} + H_2O$		2.7×10^7	Average of 4 values.	
			7.8	2.7×10^7	p.r.; P.b.k. (O_2^-) at 250-270 nm in soln. contg. 1.59 $\times 10^{-2}$ mol L^{-1} H_2O_2; reaction studied at 14-160°C.	82A096
			7	2.0×10^7	p.r.; C.k.; rel. to $k(.OH + SCN^-)$.	81A374
			7.7-11.0	3.8×10^7	p.r.; C.k.; obs. luminol radical; rel. to $k(.OH +$ luminol).	80A221
			7	2.4×10^7	p.r.; C.k.; rel. to $k(.OH + I^-)$.	650010