No. Compound name	Reaction equation	pH Rate constant $(L \text{ mol}^{-1} \text{ s}^{-1})$	Comments	Reference
572 m-Xylene	$H^{\bullet} + C_6H_4(CH_3)_2$ 1,3- $C_6H_5(CH_3)_2$	$\longrightarrow$ 1 $2.6 \times 10^9$	p.r.; P.b.k. in soln. contg. 0.1-0.5 mol $\rm L^{-1}$ tert-BuOH and HClO <sub>4</sub> .	751009