

No.	Compound name	Reaction equation	pH	Rate constant (L mol <sup>-1</sup> s <sup>-1</sup> )	Comments	Reference
171	Acetanilide	$\text{H}^\cdot + \text{C}_6\text{H}_5\text{NHCOCH}_3 \longrightarrow \text{C}_6\text{H}_6\text{NHCOCH}_3$		$1.0 \times 10^9$	Average of 2 values.	
				1	$1.0 \times 10^9$	$\varepsilon$ -r.; esr; Decay
			8-9		$9.9 \times 10^8$	$\gamma$ -r.; C.k.; rel. to