| No.  | Compound name    | Reaction equation                        | рН | Rate constant $(L \operatorname{mol}^{-1} \operatorname{s}^{-1})$ | Comments   | Reference |
|------|------------------|--|----|---|--|-----------|
| 11.1 | Nitrogen dioxide | $NO_2 + \cdot OH \longrightarrow HO_2NO$ |    | $1\times10^{10}$  | f.p.; Estd. from condy. study in $5 \times 10^{-4}$ mol L <sup>-1</sup> HNO <sub>3</sub> ; rel. to $k(\cdot OH + \cdot OH)$ .  | 80A366    |
|      |                  |  | 9  | $1.3\times10^{9}$   | p.r.; Meas. buildup of abs. at 302 nm in NO $_3^-$ soln.; calcn. involves $k(\cdot OH + \cdot OH) = 0.6 \times 10^{10}$ and $k(\text{NO}_3^{2-} + \text{H}_2\text{O} \longrightarrow \text{NO}_2 + 2\text{OH}^-) = 5.5 \times 10^4\text{s}^{-1}$ . | 700151    |