

| No. | Compound name | Reaction equation  | pH                       | Rate constant<br>(L mol <sup>-1</sup> s <sup>-1</sup> )   | Commer  |
|-----|---------------|--|--------------------------|---|---------|
| 876 | Methane       | $\cdot\text{OH} + \text{CH}_4 \longrightarrow \cdot\text{CH}_3 + \text{H}_2\text{O}$ |                          | $1.1 \times 10^8$   | Average |
|     |               |  | $1.0 \times 10^8$        | p.r.; D.k. (OH) at 250 nm in soln. contg. $1.16 \times 10^{-3}$ mol L <sup>-1</sup> CH <sub>4</sub> , and N <sub>2</sub> O. | 751055  |
|     |               |  | 5.5<br>$1.2 \times 10^8$ | p.r.; D.k. (OH) at 250 nm in $\sim 1 \times 10^{-3}$ mol L <sup>-1</sup> N <sub>2</sub> O-CH <sub>4</sub> soln.             | 720445  |