

| No. | Compound name | Reaction equation | pH | Rate constant (L mol ⁻¹ s ⁻¹) | Comments | Reference |
|-----|---------------|--|----|---|---|-----------|
| 5 | Bromine | $\text{H}^+ \text{Br}_2 \longrightarrow \text{Br}_2^{\cdot-} + \text{H}^+$ | 1 | $\sim 1 \times 10^{10}$ | p.r.; P.b.k. at 360 nm (Br_2^-), competes favorably with $\text{H} + \text{O}_2$; uncertainty in the value is 5-fold. | 650382 |