

No.	Compound name	Reaction equation	pH	Rate constant (L mol <sup>-1</sup> s <sup>-1</sup> )	Comments
19	Carbonate Ion	$\cdot\text{OH} + \text{CO}_3^{2-} \longrightarrow \text{OH}^- + \text{CO}_3^{\cdot-}$		$3.9 \times 10^8$	Selected value. p.r.; P.b.k. (studied of carbonate and hydroxide ion concn. pressurized up to 240 psi He)
				$4.0 \times 10^8$	p.r.; P.b.k. (studied over a range of hydroxide ion concn. at 0-200°C, pres. 240 psi He)
		11	$3.7 \times 10^8$	p.r.; P.b.k. at 600 nm.	700247
		10.6	$4.0 \times 10^8$	p.r.; P.b.k. at 600 nm.	690379
		< 11.6	$4.2 \times 10^8$	p.r.; P.b.k.; <i>k</i> is pH dependent; calcn. is indirect.	660139
		11	$3.2 \times 10^8$	p.r.; C.k.; rel. to <i>k</i> ( $\cdot\text{OH} + \text{I}^-$ ).	650010
		11	$3.5 \times 10^8$	p.r.; P.b.k. at 580 nm.	650010