

Table 2. Rate constants for hydration and dehydration of CO₂ corrected to infinite dilution at 25°C using Eq. 14–17. Rate constants in seawater were taken from Table 1. Activity coefficients are also shown.

	S ($\times 10^3$)				Mean (1 SD)
	3.4	22.36	33.77	37.06	
$k^0 \text{CO}_2 \times 10^2$	3.5	4.0	3.6	3.5	3.7(0.2)
$k^0 \text{OH}^- K_w \times 10^{11}$	7.3	6.1	7.1	7.8	7.1(0.7)
$k^0_d \times 10^{-4}$	6.0	8.7	7.7	7.9	7.6(1.1)
$k^0 \text{HCO}_3^- \times 10^4$	2.0	1.7	1.4	2.0	1.8(0.3)
Ionic strength					
	0.07	0.46	0.70	0.77	
$y \text{CO}_2$	1.02	1.11	1.17	1.18	
$y \text{HCO}_3^-$	0.79	0.58	0.53	0.52	
$y^+ \text{HCO}_3^-$	0.83	0.66	0.62	0.61	