

Oxidation reaction path	Reaction rate coefficient ($\text{L moles}^{-1} \text{ s}^{-1}$) at 298 K	Temperature dependence $\frac{-E}{R}$ (K)
$\text{O}_3(\text{aq}) + \text{SO}_2 * \text{H}_2\text{O} \rightarrow \text{S}^{\text{VI}}$	$k_0 = 2.4 \times 10^4$	0
$\text{O}_3(\text{aq}) + \text{HSO}_3^- \rightarrow \text{S}^{\text{VI}}$	$k_1 = 3.5 \times 10^5$	-5530
$\text{O}_3(\text{aq}) + \text{SO}_3^{2-} \rightarrow \text{S}^{\text{VI}}$	$k_2 = 1.5 \times 10^9$	-5280
$\text{H}_2\text{O}_2(\text{aq}) + \text{HSO}_3^- \rightarrow \text{S}^{\text{VI}}$	$k_3 = 7.45 \times 10^7$	-4430