(1)	$2S_4O_6^{2-} + 8.5ClO_2^- + 6H_2O \xrightarrow{k_1} 12H^+ + 8SO_4^{2-} + 7.5Cl^- + ClO_3-$	$r_1 = k_1 \cdot [S_4O_6^{2-}] \cdot [ClO_2^-] \cdot [H^+]^2$
$(3^b\|^a 2)$	$H^+ + OH^- \underset{k_b}{\overset{k_a}{\rightleftharpoons}} H_2O$	$\begin{cases} r_a = k_a \cdot [H^+] \cdot [OH^-] \\ r_b = k_b \cdot [H_2O] \end{cases}$
$(5^b\|^a 4)$	$ClO_2^- + H^+ \underset{k_b}{\overset{k_a}{\rightleftharpoons}} HClO_2$	$\begin{cases} r_a = k_a \cdot [ClO_2^-] \cdot [H^+] \\ r_b = k_b \cdot [HClO_2] \end{cases}$
$(7^b\|^a 6)$	$H^+ + SO_4^{2-} \underset{k_b}{\overset{k_a}{\rightleftharpoons}} HSO_4^-$	$\begin{cases} r_a = k_a \cdot [H^+] \cdot [SO_4^{2-}] \\ r_b = k_b \cdot [HSO_4^-] \end{cases}$
(8)	$13ClO_2^- + 12H^+ + 24S_2O_3^{2-} \xrightarrow{k_8} 10S_4O_6^{2-} + 8SO_4^{2-} + 6H_2O + 13Cl^-$	$r_8 = k_8 \cdot [ClO_2^-] \cdot [H^+] \cdot [S_2O_3^{2-}]$
(9)	$2S_4O_6^{2-} + 8.5ClO_2^- + 6H_2O \xrightarrow{k_9} 12H^+ + 8SO_4^{2-} + 7.5Cl^- + ClO_3-$	$r_9 = k_9 \cdot [S_4O_6^{2-}] \cdot [ClO_2^-] \cdot [H^+]^3$

Species in `TEKO11.ODE`

y_1: $S_4O_6^{2-}$ y_2: ClO_2^- y_3: H^+ y_4: OH^- y_5: $HClO_2$ y_6: HSO_4^- y_7: SO_4^{2-} y_8: $S_2O_3^{2-}$
y_9: H_2O y_{10}: Cl^- y_{11}: ClO_3-