No.	Reaction	Rate constant[a]	Reference
R1	$Hg^0 + O_3 \rightarrow Hg^{II}$	$k_1 = 1.7 \times 10^{-18}$ (upper)	Schroeder et al. (1991)
		$k_1 = 3 \times 10^{-20}$ (lower)	Hall (1995)
R2	$Hg^0 + OH \rightarrow Hg^{II}$	$k_2 = 3.2 \times 10^{-13} \times (T/298)^{-3.06}$ (upper)	Goodsite et al. (2004)
		$k_2 = 8.7 \times 10^{-14}$ (lower)	Sommar et al. (2001)
R3	$Hg^0 + Br \rightarrow Hg^IBr$	$k_3 = 3.2 \times 10^{-12}$ (upper)	Ariya et al. (2002)
		$k_3 = 1.46 \times 10^{-32} \times (T/298)^{-1.86} \times [M]$ (lower)	Donohoue et al. (2006)
R4[b]	$Hg^IBr \rightarrow Hg^0 + Br$	$k_4\ [s^{-1}] = k_3/K_{eq}$	Dibble et al. (2012)
R5	$Hg^IBr + Br \rightarrow Hg^0 + Br_2$	$k_5 = 3.9 \times 10^{-11}$	Balabanov et al. (2005)
R6	$Hg^IBr + NO_2 \rightarrow Hg^{II}$	$k_6 = 8.6 \times 10^{-11}$	Dibble et al. (2012); Wang et al. (2014)
R7	$Hg^IBr + OH \rightarrow Hg^{II}$	$k_7 = 6.3 \times 10^{-11}$	Dibble et al. (2012); Wang et al. (2014)
R8	$Hg^IBr + HO_2 \rightarrow Hg^{II}$	$k_8 = 8.2 \times 10^{-11}$	Dibble et al. (2012); Wang et al. (2014)
R9	$Hg^IBr + Br \rightarrow Hg^{II}$	$k_9 = 6.3 \times 10^{-11}$	Dibble et al. (2012); Wang et al. (2014)
R10	$Hg^IBr + BrO \rightarrow Hg^{II}$	$k_{10} = 1.1 \times 10^{-10}$	Dibble et al. (2012); Wang et al. (2014)