

FH2O	$(1.0 + 1.4 e^{-21} * h2o * \exp(2200 * TINV))$
*	
K80	$3.2 e^{-30} * M * (TEMP/300) ** (-4.5)$
K81	$3.0 e^{-11}$
KR8	$K80 / K81$
FC8	0.41
NC8	$0.75 - 1.27 * (\text{LOG10}(FC8))$
F8	$10 ** (\text{LOG10}(FC8) / (1 + (\text{LOG10}(KR8) / NC8) ** 2))$
KMT08	$(K80 * K81) * F8 / (K80 + K81)$
KMT3_OH_HNO3	$KMT3(2.4 e^{-14}, 460., 6.5 e^{-34}, 1335., 2.7 e^{-17}, 2199.)$