AS – 568 High Temperature Gas Dynamics
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General species data for thermodynamic calculations

Species	Theta_r [K]	Theta_v [K]	Q_el	Heat of formation at 298K [kJ/mol]
CO	2.8	3120	1 +2exp(-93500/T)	-110.527
O_2	2.1	2270	3 +2exp(-11400/T)	0
N_2	2.9	3390	1 +2exp(-99600/T)	0
NO	2.44	2740	2 +2exp(-174/T) +2exp(-63300/T)	+90.291
O			5 + 3exp(-228/T) + exp(-326/T) + 5exp(-22850/T)	+249.173
N			4 + 6exp(−27658.7/T) + 4exp(−27671.7/T) + 6exp(−41492.4/T)	+472.683
N+			9+5exp(-22055/T)+exp(-47070/T)	+1873.0
O+			4+10exp(-38620/T)+6exp(-58270/T)	+1560.3
NO+	2.86	3419	2 +2exp(-174/T) +2exp(-75090/T)	+988.2
electron			2	
CO_2	0.56	1915 961 961 3383	1 +1exp(-90000/T)	-393.522
C(g)			9+5exp(-10200/T)+exp(-21700/T)	716.670
H				217.999
H_2	87	6340	G0+g1exp(-132030/T)	0
OH	27.18	5378	4+g1exp(-47060/T)	38.987
H_2O	13.37 20.87 40	5259 2297 5409	1+g1exp()	-241.826
Ar			1+5exp(-134130/T)	0

Species	Theta_dissoc [K]	Theta_Ionisation [K]
O2	59500	142000
N2	113000	181000
NO	75500	108000
O		158000
N		169000