

Progress variable coefficients for methane-air combustion over flammability limits (premixed flames database), nonnormalized  $Y_c$  (method A.2 of Table 1).

Species	$\alpha_i$	Species	$\alpha_i$	Species	$\alpha_i$
H <sub>2</sub>	-11.796243	CH <sub>3</sub> O	-0.000922	HNO	-0.107832
H	-13.942108	CH <sub>3</sub> OH	-0.070185	CN	-0.008921
O	-9.108564	C <sub>2</sub> H	-0.036843	HCN	-14.041268
O <sub>2</sub>	-141.121057	C <sub>2</sub> H <sub>2</sub>	-26.780023	H <sub>2</sub> CN	-0.000074
OH	-170.273630	C <sub>2</sub> H <sub>3</sub>	-0.010588	HCNN	-0.000085
H <sub>2</sub> O	7.175836	C <sub>2</sub> H <sub>4</sub>	2.918515	HCNO	-0.015065
HO <sub>2</sub>	-0.049467	C <sub>2</sub> H <sub>5</sub>	-0.000730	HOCN	-0.020636
H <sub>2</sub> O <sub>2</sub>	-0.006776	C <sub>2</sub> H <sub>6</sub>	-0.123686	HNCO	-6.62610
C	-0.107610	HCCO	-0.303510	NCO	-0.019038
CH	-0.029366	CH <sub>2</sub> CO	-1.114097	N <sub>2</sub>	-35.335543
CH <sub>2</sub>	-0.289280	HCCOH	-0.168362	C <sub>3</sub> H <sub>7</sub>	-0.000001
CH <sub>2</sub> (S)	-0.015561	N	-0.063930	C <sub>3</sub> H <sub>8</sub>	0.000076
CH <sub>3</sub>	-7.586523	NH	-0.125385	CH <sub>2</sub> CHO	-0.000106
CH <sub>4</sub>	-51.729868	NH <sub>2</sub>	-0.789434	CH <sub>3</sub> CHO	-0.00013
CO	41.153269	NH <sub>3</sub>	-54.222633		
CO <sub>2</sub>	14.055458	NNH	-0.000648		
HCO	-0.073334	NO	-17.716413		
CH <sub>2</sub> O	-1.248240	NO <sub>2</sub>	0.130901		
CH <sub>2</sub> OH	-0.028610	N <sub>2</sub> O	-0.350673		