

## Define reactants and species to be considered

Reactants

Natural Gas + Air ▼

Products

Soot formation ▼

List of Species

CO2

CO

H2O

H2

O2

% Fuel 8.367

O/F 2.3

Phi 1

Species	N° moles	Mole fraction	Type	Temperature [K]
N2	8.6524	0.7239	Inert	300
O2	2.3000	0.1924	Oxidizer	300
CH4	0.8500	0.0711	Fuel	300
C2H6	0.1000	0.0084	Fuel	300
C3H8	0.0500	0.0042	Fuel	300

## Select Problem Type

HP: Adiabatic T and composition at constant P ▼

 Frozen chemistry Ionized species

## Define state of reactants and products

Reactants

300

Temperature [K]

1

Pressure [bar]

Products

1

## Additional constraints

Products

Constant Enthalpy:  $hP = hR$ 

Calculate

Clear

Welcome to Combustion Toolbox v0.5 --- A MATLAB-GUI based open-source tool for solving combustion problems.

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