0.15% \( \text{C}_2\text{H}_6 \) in \( \text{N}_2 \), \( \Phi = 0.1 \), \( p = 1.0 \) atm, \( \tau = 0.1 \) s

![Graph showing the mole fraction of C2H4 and C2H6 in N2 with different mechanisms at various temperatures.](image-url)
0.15% \text{C}_2\text{H}_6 \text{ in N}_2, \Phi = 0.1, p = 1.0 \text{ atm, } \tau = 0.1 \text{ s}

- CH4
- Aramco Mech 1.3 (dashed line)
- Aramco Mech 2.0 (solid line)

Mole Fraction

T / K

0.0E+000 850 900 950 1000 1050 1100 1150 1200 1250

0.15% \text{C}_2\text{H}_6 \text{ in N}_2, \Phi = 0.1, p = 1.0 \text{ atm, } \tau = 0.1 \text{ s}

- CO
- Aramco Mech 1.3 (dashed line)
- Aramco Mech 2.0 (solid line)

Mole Fraction

T / K

0.0E+000 850 900 950 1000 1050 1100 1150 1200 1250
0.15% C₂H₆ in N₂, Φ = 0.1, p = 1.0 atm, τ = 0.1 s

CO₂
Aramco Mech 1.3
Aramco Mech 2.0

0.15% C₂H₆ in N₂, Φ = 1.5, p = 1.0 atm, τ = 0.1 s

C₂H₂
Aramco Mech 1.3
Aramco Mech 2.0
0.15% C$_2$H$_6$ in N$_2$, $\Phi = 1.5$, $p = 1.0$ atm, $\tau = 0.1$ s
0.15% C₂H₆ in N₂, Φ = 1.5, p = 1.0 atm, τ = 0.1 s

CH₄
Aramco Mech 1.3
Aramco Mech 2.0

0.15% C₂H₆ in N₂, Φ = 1.5, p = 1.0 atm, τ = 0.1 s

CO
Aramco Mech 1.3
Aramco Mech 2.0
0.15% C$_2$H$_6$ in N$_2$, $\Phi = 1.5$, $p = 1.0$ atm, $\tau = 0.1$ s

![Graph of CO$_2$ mole fraction vs. temperature for different mechanisms.](image1)

![Graph of H$_2$ mole fraction vs. temperature for different mechanisms.](image2)