

①

$$n_{M_m} = 1.72 / 54.94 = 0.0313 \text{ mol}$$

$$M_0 = 1/16 = 0.0625 \text{ mol}$$

$$M_0 / n_{M_m} \approx 2 \quad M_m O_2 \quad \boxed{B}$$

②

$$n_{C_6H_6} = 200 / 78 = 2.56 \text{ mol}$$

$$X_{NAF} = 0.6 / (2.56 + 0.6) = 0.19$$

$$\Delta P = 0.125 \cdot 0.19 = 0.024 \text{ atm}$$

$$P = 0.125 - 0.024 = 0.101 \text{ atm}$$

\boxed{D}

③

$$Z = 6 \quad \text{per } C \quad \left(\begin{array}{l} \text{numero} \\ \text{protoni} \end{array} \right)$$

\boxed{B}

④

$$\Delta H^{\circ} = \sum_i n_i \cdot \Delta H_{f,i}^{\circ} (\text{PRODOTTI}) -$$

$$\sum_j m_j \Delta H_{f,j}^{\circ} (\text{REAGENTI})$$

$$-906.2 = 6(-241.8) + 4 \cdot X \quad \xrightarrow{-7 \Delta H_{f,i}^{\circ} (\text{NO})}$$

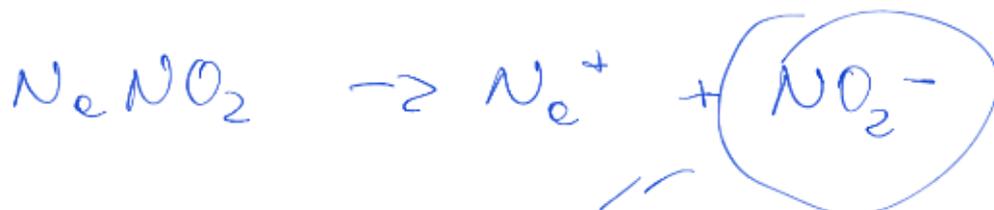
$$-906.2 = 4(-45.9)$$

$$- \Delta H_{f,i}^{\circ} (\text{NO}) = \frac{1450.8 + 183.6 + 906.2}{4}$$

$$\Delta H_{f,i}^{\circ} (\text{NO}) = 90.25 \text{ kJ/mol}$$

A

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BASE CONIUGATA di
ACIDO DEBOLE
 $K_b = K_w / K_a (\text{HNO}_2)$



B

 FALSA

⑥

$$M_{\text{NAPTALENE}} = \frac{100.0}{128} = 0.78 \text{ mol} \\ \Rightarrow M = 6.24 \text{ mol}$$

$$M_{\text{BENZINE}} = \frac{100}{78} = 1.28 \text{ mol} \\ \Rightarrow M = 7.68 \text{ mol}$$

$$M_{\text{ACETILENE}} = \frac{100}{26} = 3.85 \text{ mol} \\ \Rightarrow M = 7.70 \text{ mol}$$

$$M_{\text{TOLUENE}} = \frac{100}{92} = 1.09 \text{ mol} \\ \Rightarrow M = 8.72 \text{ mol}$$

$$\text{NUMERO ATOMI} = \text{mol} \cdot N_{\text{AVOGADRO}}$$

A