Subiectul B. ELEMENTE DE TERMODINAMICĂ

tal D. EE	EMENTE DE TERMODINAMICA
II.a.	
	$m = \frac{pV\mu}{RT}$
	Rezultat final: $m \approx 2,33 \mathrm{kg}$
b.	
	$pV = \frac{m}{\mu}RT$
	$\rho V = \frac{m}{\mu} RT$ $\rho = \frac{\rho \mu}{RT}$
	Rezultat final: $\rho = 1,16 \text{ kg/m}^3$
c.	
	$pV = \frac{N}{N_A}RT$ $N = \frac{pV}{RT}N_A$
	$N = \frac{pV}{RT}N_A$
	Rezultat final: $N \approx 4.8 \cdot 10^{22}$
d.	
	$\mu_{am} = \frac{m_{am}}{v_{am}} = \frac{m + m_2}{v + v_2}$
	$\mu_{am} = \frac{m_{am}}{v_{am}} = \frac{m + m_2}{v + v_2}$ $\mu_{am} = \frac{v\mu + v_2\mu_2}{v + v_2}$
	$\mu_{am} = \frac{\frac{N}{N_A} \mu + \frac{N_2}{N_A} \mu_2}{\frac{N}{N_A} + \frac{N_2}{N_A}}$
	$\mu_{am} = \frac{N\mu + N_2\mu_2}{N + N_2}$
	Rezultat final: $\mu_{am} \approx 30.7 \cdot 10^{-3} \text{ kg/mol}$