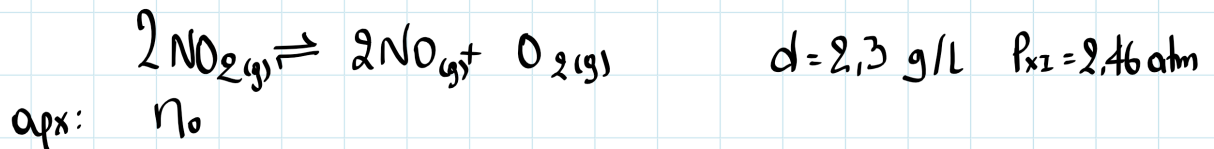


Άσκηση 434

500 K



αρχ: n_0

αλη: $-2x$

$2x$

x

$$\alpha = \frac{2x}{n_0}$$

x.1: $n_0 - 2x$

$2x$

x

$$\Rightarrow n_{x1} = n_0 - 2x + 2x + x = n_0 + x$$

$$\text{6η x.1. : } P \cdot V = n_{x1} \cdot R \cdot T \Rightarrow 2,46 \cdot V = (n_0 + x) \cdot 0,082 \cdot 500 \Rightarrow$$

$$\Rightarrow 2,46 \cdot \frac{m_{\text{ολ}}}{d} = (n_0 + x) \cdot 0,082 \cdot 500 \Rightarrow$$

$$\Rightarrow 2,46 \cdot \frac{[(n_0 - 2x) \cdot 46 + 2x \cdot 30 + x \cdot 32]}{2,3} = (n_0 + x) \cdot 41 \Rightarrow$$

$$\Rightarrow 2,46 \cdot \frac{[46n_0 - 92x + 60x + 32x]}{2,3} = (n_0 + x) \cdot 41 \Rightarrow$$

$$\Rightarrow 2,46 \cdot \frac{46n_0}{2,3} = 41 \cdot n_0 + 41x \Rightarrow 2,46 \cdot 20n_0 = 41n_0 + 41x$$

$$\Rightarrow 49,2n_0 - 41n_0 = 41x$$

$$\Rightarrow 8,2n_0 = 41x$$

$$\Rightarrow \frac{x}{n_0} = \frac{8,2}{41} \Rightarrow \frac{x}{n_0} = 0,2$$

οπότε: $\alpha = \frac{2x}{n_0} = 2 \cdot 0,2 = 0,4$ ή 40%