

$$P_{\text{eq}} \text{N}_2\text{O}_4 = 2 - x$$

$$P_{\text{eq}} \text{NO}_2 = 2x$$

$$P_{\text{TOTALE}} = P_{\text{eq}} \text{N}_2\text{O}_4 + P_{\text{eq}} \text{NO}_2 \rightarrow 2 - x + 2x = 1,50 \rightarrow$$

$$x = -2 + 1,50 \rightarrow x = -0,5$$

$$P_{\text{eq}} \text{N}_2\text{O}_4 = 2 - (-0,5) = 2 + 0,5 = 2,5$$

$$P_{\text{eq}} \text{NO}_2 = 2x = 2(-0,5) = -1$$

$$K_p = \frac{(P_{\text{eq}} \text{NO}_2)^2}{P_{\text{eq}} \text{N}_2\text{O}_4} = \frac{1}{2,5} = 0,4 \text{ atm}$$