



$$\rho_4 = x_4 \rho_{fg}^{\text{sat}}(-20^\circ\text{C}) + (1 - x_4) \rho_{q4}^{\text{sat}}(-20^\circ\text{C}) \text{ donc } x_4 = \frac{\rho_4 - \rho_{q4}^{\text{sat}}(-20^\circ\text{C})}{\rho_{fg}^{\text{sat}}(-20^\circ\text{C}) - \rho_{q4}^{\text{sat}}(-20^\circ\text{C})} = \frac{245 - 175}{385 - 175} = 0.33 \text{ (écartant 1)}$$