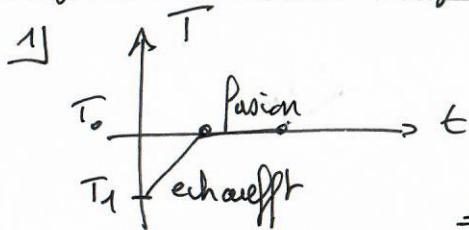


Corrigé Exo C4 Changement d'état



$$Q_{reue} = m \left(\underbrace{c_{sol} (T_0 - T_i)}_{\text{echaufft}} + \underbrace{\Delta h_{fus}}_{\text{fusion}} \right)$$

$$\Rightarrow Q_{reue} = 36,8 \text{ kJ}$$

$$\begin{aligned} 2] \Delta S_{eau} &= m \left[c_{sol} \ln \left(\frac{T_0}{T_1} \right) + \frac{\Delta h_{fus}}{T_0} \right] \\ &= 0,135 \text{ kJ K}^{-1} \end{aligned}$$

$$S^e = \frac{Q_{reue}}{T_{ext}} = 0,125 \text{ kJ K}^{-1}$$

$$\Rightarrow S^c = \Delta S_{eau} - S^e = 10 \text{ J K}^{-1} > 0 \quad \text{Transfo} \\ \text{inv}$$