(a) \( T \) (K)

![Graph showing \( \log_{10} k \) vs. \( 1000/T \) for KCl and MgSO4 with relevance to eutectic points and heat of fusion.]

- **KCl**
  - Eutectic Point (262.5 K)
  - \( Q = 68 \pm 46 \text{ kJ/mol} \)

- **MgSO4**
  - Eutectic Point (269.5 K)
  - \( Q = 142 \pm 57 \text{ kJ/mol} \)

(b) \( T \) (K)

![Graph showing \( \log_{10} k \) vs. \( 1000/T \) for KCl and MgSO4 with relevance to eutectic points and heat of fusion.]

- **KCl**
  - Eutectic Point (262.5 K)
  - \( Q = 161 \pm 25 \text{ kJ/mol} \)

- **MgSO4**
  - Eutectic Point (269.5 K)
  - \( Q = 68 \pm 46 \text{ kJ/mol} \)