

$\text{KNO}_3$ : ① 0,1 mol.L, 5ml, 368,15 K

② Cool to 358,15 K

③ 5ml water added, cooled to 322,15 K

0,1 mol.L at 358,15 K

0,05 mol.L at 322,15 K

→  $C \cdot V \equiv C \cdot V$

$$0,1 \cdot 0,005 = C \cdot 0,010$$

$$C = 0,05 \text{ mol.L}$$

$$\begin{aligned}\Delta H^\circ &= -8,31 (\ln 0,05 - \ln 0,1) (322,15 - 358,15) \\ &= 25,43 \text{ kJ} \cdot \text{mol}^{-1}\end{aligned}$$

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