⑤ COMPITO D II° INTERROGO

Calcolare la % di 2mCl e un certo solvente

acquoso che bolle a 100,90°C. $K_{eb\,H_2O} = 0,514\ kg/mol$

DATI

T = 100,90°C

$K_{eb\,H_2O} = 0,514\ kg/mol$

$$2mCl_2 \rightleftarrows 2m^{2+} + 2Cl^-$$

$$\Delta t_{eb} = K_{eb} \cdot m \cdot i$$

$$m = \frac{\Delta t_{eb}}{K_{eb} \cdot i} = \frac{(100 - 100,90)}{0,514 \cdot 3} = \frac{0,90}{0,514 \cdot 3} = 0,58\ \frac{mol}{kg}$$

$g_{soluto} = 0,58\ mol \cdot 136,286\ g/mol = 79,04\ g$

$g_{solvente} = 1000\ g$

$g_{slv} = 79,04 + 1000\ g = 1079,04$

$$\% = \left(\frac{79,04\ g}{1079,04}\right) \cdot 100 = 7,32\ \%$$