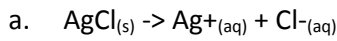


Ex 1.



b. $\sigma = \lambda_{\text{Ag}^+} \times c + \lambda_{\text{NO}_3^-} \times c$

$\sigma = (\lambda_{\text{Ag}^+} + \lambda_{\text{NO}_3^-}) \times c$
 mS.m^{-1} $\text{mS.m}^2.\text{mol}^{-1}$ mol.m^{-3}

c. $\sigma = (6,13 + 7,142) \times \frac{5,00 \times 10^{-3} \times 10^3}{\text{en mol.m}^{-3}} = 66,7 \text{ mS.m}^{-1}$

d. $c = \frac{\sigma}{\lambda_{\text{Ag}^+} + \lambda_{\text{NO}_3^-}} = \frac{13,3}{13,332} = 1,00 \text{ mol.m}^{-3} = 1,00 \times 10^{-3} \text{ mol.L}^{-1}$

Ex 2.

a. ions chlorure Cl^- ; ion sodium Na^+
ions bromure Br^- ; ion potassium K^+

b. $n_{\text{Na}^+} = n_{\text{Cl}^-} = n_{\text{NaCl}} = \frac{m_{\text{NaCl}}}{M_{\text{NaCl}}} = \frac{0,117}{35,5 + 23,0} = 2,00 \times 10^{-3} \text{ mol.m}^{-3}$

$n_{\text{Br}^-} = n_{\text{K}^+} = n_{\text{KBr}} = \frac{m_{\text{KBr}}}{M_{\text{KBr}}} = \frac{0,113}{79,9 + 39,1} = 1,00 \times 10^{-3} \text{ mol}$

d'où $[\text{Na}^+] = [\text{Cl}^-] = \frac{n_{\text{Na}^+}}{V} = \frac{n_{\text{Cl}^-}}{V} = \frac{2,00 \times 10^{-3}}{2,0} = 1,0 \times 10^{-3} \text{ mol.L}^{-1} = 1,0 \text{ mol.m}^{-3}$

$[\text{Br}^-] = [\text{K}^+] = \frac{n_{\text{Br}^-}}{V} = \frac{n_{\text{K}^+}}{V} = \frac{1,00 \times 10^{-3}}{2,0} = 0,50 \times 10^{-3} \text{ mol.L}^{-1} = 0,50 \text{ mol.m}^{-3}$

c. $\sigma = \lambda_{\text{Cl}^-} \times [\text{Cl}^-] + \lambda_{\text{Na}^+} \times [\text{Na}^+] + \lambda_{\text{Br}^-} \times [\text{Br}^-] + \lambda_{\text{K}^+} \times [\text{K}^+]$
 $= (\lambda_{\text{Cl}^-} + \lambda_{\text{Na}^+}) \times 1,0 + (\lambda_{\text{Br}^-} + \lambda_{\text{K}^+}) \times 0,50$
 $= (7,63 + 5,01) + (7,83 + 7,35) \times 0,50$
 $= 20,2 \text{ mS.m}^{-1}$

non donné dans le tableau
→ à rechercher
ou internet!

d. $\sigma' = \frac{\sigma}{10} = 2,02 \text{ mS.m}^{-1}$ car $[\text{x}]/10!$