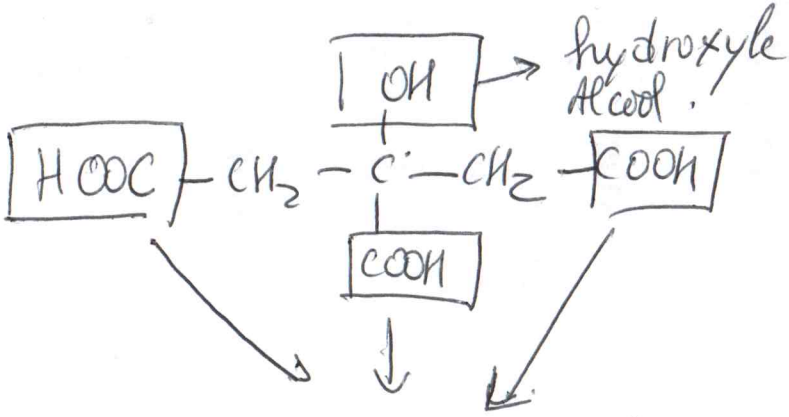


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Correc~~t~~ Acide Citrique.

111

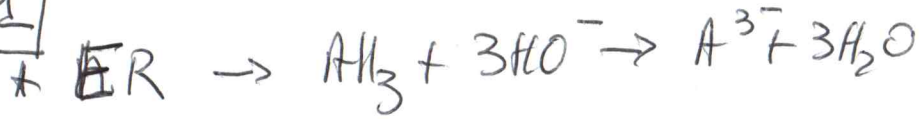


12

Carboxyle responsable de l'acidit 

ils sont capables de lib rer un proton H⁺.

211



$$* \text{BM} \quad n(\text{Al}_3) = \frac{n(\text{HO}^-)}{3} = \dots$$

$$* V_{\text{Eq}} = 31 \text{ mL}$$

$$* n(\text{HO}^-) = c \times V_E = 1 \times 10^{-1} \times 31 \times 10^{-3} = 3,1 \times 10^{-3} \text{ mol.}$$

$$\text{done } n(\text{Al}_3) = \frac{n(\text{HO}^-)}{3} = 1,03 \times 10^{-3} \text{ mol}$$

$$C(\text{Al}_3) = \frac{n(\text{Al}_3)}{V_{\text{essai}}} = \frac{1,03 \times 10^{-3}}{10 \times 10^{-3}} = 0,103 \text{ mol/L}$$

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$$* n = C(\text{Al}_3) \times V_{\text{sol}} = 0,103 \times 2 = 0,206 \text{ mol.}$$

$$* m(\text{Al}_3) = n \times M(\text{Al}_3) = 0,206 \times 132 = 39,6 \text{ g.}$$

$$* p = \frac{m(\text{Al}_3)}{m_{\text{s chet}}} \times 100 = \frac{39,6}{40} \times 100 = 99,9\%$$

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$$\frac{\Delta V_A}{V_A} = \frac{\Delta V_E}{V} = 0,5\%$$

$$\frac{\Delta V_{\text{Eq}}}{V_{\text{Eq}}} = 1\%$$

$$\frac{\Delta C_B}{C_B} = \frac{0,002 \times 10^{-1}}{1 \times 10^{-1}} = 0,2$$

$$\begin{aligned}
 \frac{\Delta P}{P} &= \sqrt{\left(\frac{\Delta C_B}{C_B}\right)^2 + \left(\frac{\Delta V_{\text{Eq}}}{V_{\text{Eq}}}\right)^2 + \left(\frac{\Delta V_A}{V_A}\right)^2 + \left(\frac{\Delta V}{V}\right)^2} \\
 &= \sqrt{0,02^2 + \left(\frac{1}{100}\right)^2 + \left(\frac{0,5}{100}\right)^2 + \left(\frac{0,5}{100}\right)^2} \\
 &= 0,022
 \end{aligned}$$

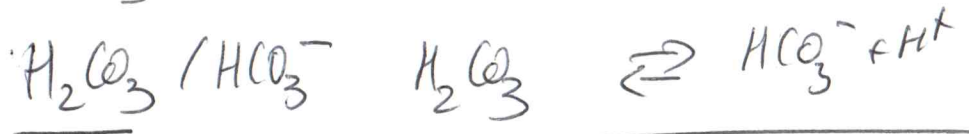
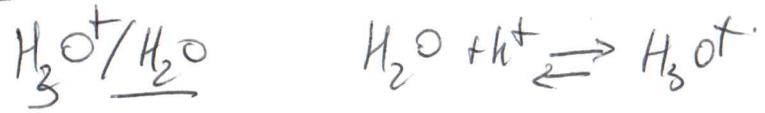
2/2

$$\Delta p = 0,022 \times p = 2,2\%$$

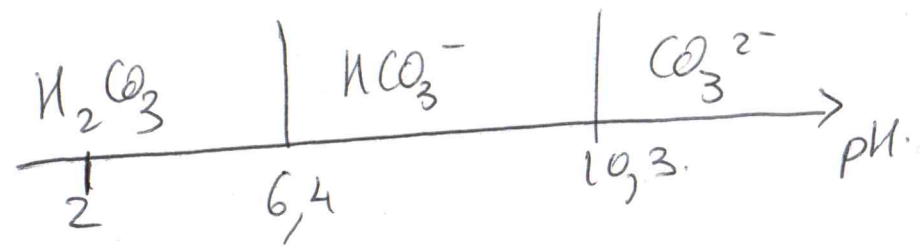
$$\text{done } 96,7\% \leq p \leq 101,1\%$$

c'est en accord car le pourcentage massique théorique ϵ est l'intervalle expérimental.

221

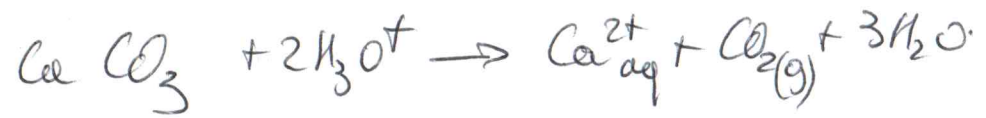


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H_2CO_3 predomine

or H_2CO_3 correspond au CO_2 dissout dans l'eau et la réaction.



produit du CO_2 (g) gaz dont une partie se dissout dans l'eau.