



Rita de Cássia malho Alves

1a) $C = \frac{3,6734g}{0,25L}$

R: A concentração em massa de $H_2C_2O_4$ é de 14,70 g/L

$C = 14,70 \text{ g/L}$

b) $M = \frac{m_i}{MM \cdot V}$

R: A concentração molar é de 0,40 mol/L.

$M = \frac{3,6734g}{90g/mol \cdot 0,1L} \Rightarrow M = 0,40 \text{ mol/L}$

2a) $C = 0,95 \cdot 1,84 \cdot 1,2L$
 $C = 2.097,6 \text{ g/L}$

R: A massa de ácido em 1,2L da solução é de 2.097,6 g/L.

b) $M = \frac{m_i}{MM \cdot V} \Rightarrow M = \frac{2.097,6g}{98g/mol \cdot 1,2L}$

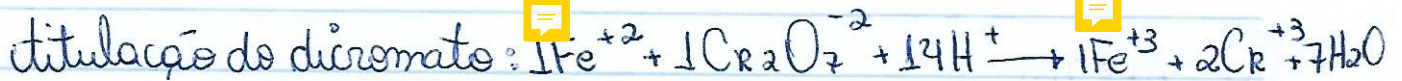
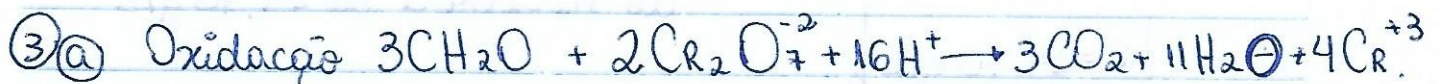
R: A concentração molar de H_2SO_4 é de 17,8 mol/L.

$M = 17,8 \text{ mol/L}$

c) $25g \text{ de } H_2SO_4 \text{ — 1000 ml}$
 $x \text{ de } H_2SO_4 \text{ — 250 ml}$
 $x = 6,25g \text{ de } H_2SO_4$

$95g \text{ — 100g solução}$
 $6,25g \text{ — } Y \text{ solução}$
 $Y = 6,58g \text{ de solução}$

$$\begin{array}{r}
 1 \text{ ml} \text{ --- } 1,84 \text{ g} \\
 z \text{ --- } 6,58 \text{ g} \\
 \hline
 z = 3,58 \text{ ml} //
 \end{array}$$



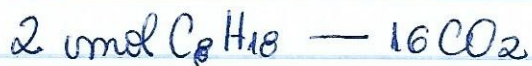
$$\begin{array}{r}
 \text{b) } 1 \text{ mol CO}_2 \text{ --- } 22,4 \text{ L} \\
 x \text{ --- } 134,4 \text{ L} \\
 \hline
 x = 6 \text{ mols CO}_2
 \end{array}
 \qquad
 \begin{array}{r}
 3 \text{ mol CH}_2\text{O} \text{ --- } 3 \text{ CO}_2 \\
 6 \text{ mol CH}_2\text{O} \text{ --- } 6 \text{ mol CO}_2
 \end{array}$$

$$\begin{array}{r}
 1 \text{ mol CH}_2\text{O} \text{ --- } 30 \text{ g} \\
 6 \text{ mol CH}_2\text{O} \text{ --- } z \\
 \hline
 z = 180 \text{ g CH}_2\text{O}
 \end{array}$$



$$\begin{array}{r}
 \text{b) } 228 \text{ g C}_8\text{H}_{18} \text{ --- } 800 \text{ g O}_2 \\
 456 \text{ g C}_8\text{H}_{18} \text{ --- } x \\
 \hline
 x = 1.600 \text{ g O}_2 //
 \end{array}$$

R: A massa necessário para combustão de 456 g de C_8H_{18} é de 1.600 g de O_2 .



$$\underline{x = 3 \text{ kg } \text{C}_8\text{H}_{18}}$$

$$1056 \text{ --- } 100\%$$

$$3 \text{ --- } x$$

$$\underline{x = 0,28 \text{ rendement}} \quad \square$$

