

$$2) \text{ C} = 37,8\%$$

$$\text{H} = 6,3\%$$

$$\text{Cl} = 55,8\%$$

$$\text{Masa} = 127,9$$

$$\text{C} = 37,8 \div 12 \text{g/mol} = 3,15 \text{ mol} \div 1,5 = 2$$

$$\text{H} = 6,3 \div 1 \text{g/mol} = 6,3 \text{ mol} \div 1,5 = 4$$

$$\text{Cl} = 55,8 \div 35 \text{g/mol} = 1,57 \text{ mol} \div 1,5 = 1$$

Formula empirica $\text{C}_2\text{H}_4\text{Cl}$

$$\text{C} = 12 \times 2 = 24$$

$$\text{H} = 1 \times 4 = 4 \quad n = 127,9 / 63 = 2$$

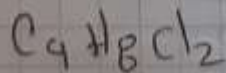
$$\text{Cl} = 35 \times 1 = \frac{35}{63}$$

$$2 \times 2 = 4$$

$$2 \times 4 = 8$$

$$2 \times 1 = 2$$

Formula molecular



EJERCICIOS

$$\begin{aligned} I \quad C &= 40\% \\ H &= 6,7\% \\ O &= 53,3\% \end{aligned} \quad \text{masa} = 90 \text{ g}$$

$$\begin{aligned} C &= 40 \div 12 \text{ g/mol} = 3,3 \text{ mol} \div 3,3 = 1 \\ H &= 6,7 \div 1 \text{ g/mol} = 6,7 \text{ mol} \div 3,3 = 2 \\ O &= 53,3 \div 16 \text{ g/mol} = 3,3 \text{ mol} \div 3,3 = 1 \end{aligned}$$

Formula empírica = CH_2O

$$\begin{aligned} C &= 12 \times 1 = 12 \\ H &= 1 \times 2 = 2 \\ O &= 16 \times 1 = 16 \\ \hline & 30 \end{aligned} \quad \begin{aligned} n &= 90 \text{ g} / 30 = 3 \\ 3 \times 1 &= 3 \\ 3 \times 2 &= 6 \\ 3 \times 1 &= 3 \end{aligned}$$

Formula
molecular $\text{C}_3\text{H}_6\text{O}_3$