

1.

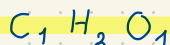
$$\left. \begin{array}{l} 40\% \text{ de C} \\ 53\% \text{ de O} \\ 7\% \text{ de H} \end{array} \right\} \text{Suponiendo } 100 \text{ g}$$

$$40 \text{ g de C} \cdot \frac{1 \text{ mol}}{12 \text{ g C}} = 3,31 \text{ mol}$$

$$53 \text{ g de O} \cdot \frac{1 \text{ mol}}{16 \text{ g}} = 3,31 \text{ mol}$$

$$7 \text{ g de H} \cdot \frac{1 \text{ mol}}{1 \text{ g}} = 7 \text{ mol}$$

Dividiendo entre el menor



2.

$$\text{C}_{21} \text{H}_{30} \text{O}_2 \quad \text{MM}_{\text{total}} = 314 \text{ g/mol} \quad (12 \cdot 21)$$

$$\% \text{ C} = \frac{252}{314} \cdot 100 = 80,21\%$$

$$\% \text{ H} = \frac{30}{314} \cdot 100 = 9,62\%$$

$$\% \text{ O} = \frac{32}{314} \cdot 100 = 10,18\%$$

3.

Suponiendo 100 g

$$10,7 \text{ g N} \cdot \frac{1 \text{ mol}}{14 \text{ g}} = 0,76$$

$$36,8 \text{ g O} \cdot \frac{1 \text{ mol}}{16 \text{ g}} = 2,3$$

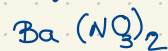
$$52,5 \text{ g Ba} \cdot \frac{1 \text{ mol}}{137 \text{ g}} = 0,38$$

Dividiendo
entre
el menor

2



1



Nitrato de bario

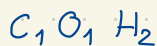
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$$40 \text{ g de C } \frac{1 \text{ mol}}{12 \text{ g}} = 3,33 \text{ mol}$$

$$53,29 \text{ g de O } \frac{1 \text{ mol}}{16 \text{ g}} = 3,33 \text{ mol}$$

$$6,71 \text{ g de H } \frac{1 \text{ mol}}{1 \text{ g}} = 6,71 \text{ mol}$$

Dividiendo
entre 3,33



Fórmula empírica

$$\text{MASA MOLAR} = n \cdot \text{MASA FÓRMULA EMPÍRICA}$$

$$182 = n \cdot 30 \quad n = 6$$

