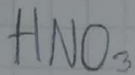


Ejercicios

① Calcular la molaridad de una disolución de 95 gramos de ácido nítrico (HNO_3) en 25g de agua.



$$\text{Masa} = 95\text{g}$$

$$\text{Volumen} = 0,025$$

$$\text{PM} = 63$$

$$m = \frac{\text{Gramos}}{(\text{PM})(\text{Kg})}$$

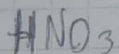
$$\text{H} = 1 \times 1 = 1$$

$$\text{N} = 1 \times 14 = 14$$

$$\text{O} = 3 \times 16 = 48$$

$$63$$

$$m = \frac{95}{(63)(0,025)} = \frac{95}{1,575} = 60,317\text{m}$$



$$\text{Masa} = 95\text{g}$$

$$\text{volumen} = 0,025$$

$$m = \frac{m}{\text{Kg}}$$

$$\text{H} = 1 \times 1 = 1$$

$$\text{N} = 1 \times 14 = 14$$

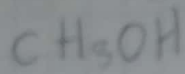
$$\text{O} = 3 \times 16 = 48$$

$$63$$

$$\frac{95\text{g}}{63\text{g/mol}} = 1,507 \text{ moles}$$

$$\frac{1,507 \text{ moles}}{0,025} = \underline{\underline{60,317}}$$

2) Calcular la molaridad de metanol (CH_3OH) en una disolución 15g donde el disolvente son 50 gramos de agua



Masa = 15g

volumen = 0,05

PM = 32

$$m = \frac{\text{gramos}}{(\text{PM}) (\text{Kg})}$$

$\text{C} = 1 \times 12 = 12$

$\text{H} = 3 \times 1 = 3$

$\text{O} = 1 \times 16 = 16$

$\text{H} = 1 \times 1 = 1$

 32

$m = \frac{15}{32 \cdot 0,05} = \frac{15}{16} = 9,375 \text{ m}$



Masa = 15

volumen = 0,05

PM = 32

$\text{C} = 1 \times 12 = 12$

$\text{H} = 3 \times 1 = 3$

$\text{O} = 1 \times 16 = 16$

$\text{H} = 1 \times 1 = 1$

 32

$\frac{15 \text{ g}}{32 \text{ g/mol}} = 0,468 \text{ moles}$

$\frac{0,468}{0,05} = \underline{\underline{9,375 \text{ m}}}$