

## Ejercicio 1

1. Calcular la molaridad de una disolución de 95 gramos de ácido nítrico  $\text{HNO}_3$  en 25g de agua.

$$m =$$

$$g = 95$$

$$\text{Agua} = 25\text{g} : 0,025\text{kg}$$



$$\text{PM} =$$

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

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

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

$$63\text{g/mol}$$

$$m = g / (\text{PM})(\text{kg})$$

$$m = 95 / (63)(0,025)$$

$$m = 95 / 1,57$$

$$m = 60,5$$

2. Calcular la molaridad de metanol  $\text{CH}_3\text{OH}$  en una disolución 15g donde el disolvente son 50 gramos de Agua.

$$m =$$

$$g = 15$$

$$\text{Agua} = 50\text{g} : 0,05$$

$$\text{PM} =$$

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

$$\text{H} = 1 \times 4 = 4$$

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

$$32\text{g/mol}$$

$$m = g / (\text{PM})(\text{kg})$$

$$m = 15 / (32)(0,05)$$

$$m = 15 / 1,6$$

$$m = 9,37$$