

Molalidad

1 Calcular la molalidad de una disolución de 95 gramos de ácido nítrico HNO_3 en 25g de agua

$$m = ?$$

$$m = \frac{95}{(63)(0.025)}$$

$$g = 95g$$

$$\text{Agua} = 25g / 1000 = 0,025 \quad m = \frac{95}{1,575}$$

$$\text{PM} =$$

$$m = 60,31$$

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

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

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

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

2 Calcular la molalidad de metanol CH_3OH en una disolución 15g donde el disolvente son 50 gramos de agua.

$$m = ?$$

$$m = \frac{15}{(32)(0.05)}$$

$$g = 15g$$

$$m = \frac{15}{1.6}$$

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

$$\text{PM} =$$

$$m = 9,375$$

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

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

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

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