

UNIDADES QUÍMICAS

de concentración

molaridad

$$M = \frac{\text{moles de soluto}}{\text{litros de solución}}$$

$$M = \frac{m}{(PM)(V)}$$

molaridad

$$m = \frac{\text{moles de soluto}}{\text{Kg de solvente}}$$

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

normalidad

$$N = \frac{\text{equivalente gr soluto}}{\text{litro de solución}}$$

Ejercicios molaridad

$$1. M = \frac{m}{(PM)(V)} = \frac{87,5g}{(46)(0,45l)} = 20,7$$

$$M = 3,98$$

$$2. M = \frac{478}{7} = 0,68 \text{ mol} \quad V = 7000 / 1000 = 7$$

$$3. m = 3,65g \quad V = 2,00l \quad M = \frac{3,65}{(36)(2,00)} = \frac{3,65}{72} =$$

$$H = 1 \times 1 = 1$$

$$Cl = 1 \times 35 = 35$$

$$36g/mol$$

$$= 0,05$$

$$4 \quad m = 49,09 \text{ g}$$

$$V = 0,25 \text{ l}$$

$$H = 2 \times 1 = 2$$

$$S = 1 \times 32 = 32$$

$$O = 4 \times 16 = 64$$

$$96 \text{ g/mol}$$

$$M = \frac{49,04}{(96) \cdot (0,25)} = \frac{49,04}{24} = 2,04$$