

# CONVERSÃO DE UNIDADES

## VOLUME:

$$1 \text{ L} = 1000 \text{ mL} = 1.000.000 \mu\text{L}$$

$$1 \text{ L} = 10^3 \text{ mL} = 10^6 \mu\text{L}$$

$$1 \mu\text{L} = 10^{-3} \text{ mL} = 10^{-6} \text{ L}$$

$$1 \text{ dm}^3 = 1 \text{ L} = 1000 \text{ cm}^3 = 1.000.000 \text{ mm}^3$$

$$1 \text{ dm}^3 = 1 \text{ L} = 10^3 \text{ cm}^3 = 10^6 \text{ mm}^3$$

## CONCENTRAÇÃO:

$$\bullet \quad 1 \text{ M} = 1 \text{ mol/L} = 10^3 \text{ mmol/L} = 10^6 \mu\text{mol/L} = 10^9 \text{ nmol/L}$$

$$1 \text{ mM} = 1 \text{ mmol/L} = 10^3 \mu\text{mol/L} = 10^6 \text{ nmol/L}$$

$$1 \mu\text{M} = 1 \mu\text{mol/L} = 10^3 \text{ nmol/L}$$

$$\bullet \quad 1 \mu\text{M} = 10^{-3} \text{ mM} = 10^{-6} \text{ M}$$

$$1 \mu\text{M} = 10^{-3} \text{ mM} = 10^{-6} \text{ M}$$

$$\bullet \quad 1 \text{ M} = 1 \text{ mol/L} = 1 \text{ mmol/mL} = 1 \mu\text{mol}/\mu\text{L}$$

$$1 \text{ mM} = 1 \text{ mmol/L} = 1 \mu\text{mol/mL} = 1 \text{ nmol}/\mu\text{L}$$

$$\bullet \quad (\text{porcentagens})$$

$$1\% (\text{P/V}) = 1 \text{ g} / 100 \text{ mL de volume final}$$

$$= 1 \text{ mg} / 100 \mu\text{L de volume final}$$

## MASSA:

$$1 \text{ g} = 10^3 \text{ mg} = 10^6 \mu\text{g}$$

$$1 \text{ mg} = 10^3 \mu\text{g}$$

## DILUIÇÕES, ETC

- Dil 1:10 (factor de diluição 10x)

1 mL / 10 mL de volume final

1  $\mu$ L / 10  $\mu$ L de volume final

10  $\mu$ L / 100  $\mu$ L de volume final

- Dil 1:100 (factor de diluição 100x)

$$1 \text{ mL} / 100 \text{ mL} = 1 \mu\text{L} / 100 \mu\text{L} = 10 \mu\text{L} / 1000 \mu\text{L}$$

$$= 2 \mu\text{L} / 200 \mu\text{L} = 20 \mu\text{L} / 2000 \mu\text{L}$$

- dil 1:50 (factor de diluição 50x)

$$1 \text{ mL} / 50 \text{ mL} = 2 \text{ mL} / 100 \text{ mL} = 20 \text{ mL} / \text{L}$$

$$= 1 \mu\text{L} / 50 \mu\text{L} = 20 \mu\text{L} / \text{mL}$$

ou ...

se colocarmos 20  $\mu$ L / 400  $\mu$ L, qual é o factor de diluição?

$$\frac{400}{20} = 20 \times \quad (\text{factor de diluição } 20 \times) \\ (\text{Diluição } 1:20)$$

ou ... (um caso mais difícil)

Dil 2:3

2 mL / 3 mL de volume final

$$\text{factor de diluição: } \frac{3}{2} = 1,5 \times$$