

Solutii

$$(1) c_t = \frac{md}{m_s} \cdot 100$$

$$(2) CM = \frac{md \cdot \cancel{100}}{V_s \cdot M}$$

M - mase moleculara.
 V_s - vol. sol. in cm^3
 md - mase solutului

1) Calculati c% a unui sol care contine 292,5g NaOH la litru, $\rho = 1,44 g/cm^3$.

$$\begin{array}{rcl} 1 cm^3 & \dots & 1,44 g \\ 1000 cm^3 & \text{---} \times & = 1440 g \text{ sol (} m_s \text{)} \end{array}$$

$$c = \frac{292,5}{1440} \cdot 100 = 20,3\%$$

2) Calculati cont. de KOH necesara pt. preparare 1 l sol de $c = 12\%$, $\rho = 1,28 g/cm^3$.

$$\rho = \frac{m}{V} \Rightarrow m_s = \rho \cdot V = 1,28 g/cm^3 \cdot 1000 cm^3 = 1280 g.$$

$$c = \frac{md}{m_s} \cdot 100 \Rightarrow md = \frac{c \cdot m_s}{100} = \frac{1280 \cdot 12}{100} = 153,6 g$$

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10% tinctura I_2
 $\rho_{etanol} = 0,8 g/cm^3$
 3,5 kg tinctura

 I_2 , alcool = ?

$$\begin{array}{rcl} 100 g \pm iod & \dots & 10 g iod. \\ 3500 g & \text{---} \times & \end{array}$$

$$\begin{array}{l} x = 350 g iod. \\ \text{cont etanol: } 3500 - 350 g = \\ 3150 g etanol. \end{array}$$

$$V_{etanol} = \frac{3150}{0,8} = 3937,5 cm^3$$