Disolvente = solución - soluto

NaCl
5g
al
80% = 4g

$\%P/P = \frac{g(soluto)}{100g(sln.)} \times 100$

$Xg\,H_2O = 50\,ml \times \frac{1\,g}{1,00\,g/ml} = 50g$

1

Densidad

Solución = 5g NaCl + 50g H_2O = 55g

% p/p = $\frac{4\,g\ NaCl}{55\,g} \times 100 = 7,27\%$

% p/v = $\frac{4\,g\ NaCl}{50\,ml} \times 100 = 10\%$.

% v/v =

M =

$X\,mol = 4\,g \cdot \frac{1\,mol}{58\,g\ NaCl} = 0,068\,mol$

$X\,L = 50\,ml \cdot \frac{1\,L}{1000\,ml} = 0,05\,L$

$M = \frac{0,068\,mol}{0,05\,L} = 1,36\,mol$

Disolvente = 55g − 5g NaCl = 50g

$X\,kg\ disolvente = 51\,g \cdot \frac{1\,kg}{1000\,g} = 0,050\,kg$

$m = \frac{0,068\,mol}{0,050\,kg} = 1,36$ molal mol/kg

N=

Na 23
Cl 35,45 = 58,45

$$4\,g\ NaCl \times \frac{1\ mol\ NaCl}{58,45\ g\ NaCl} \times \frac{1\ eq\text{-}g\ NaCl}{1\ mol\ NaCl} = 0,068\ eq\text{-}NaCl$$

$$N = \frac{0,068\ eq\text{-}NaCl}{0,05\ L} = 1,36\ eq\,g/L = 1,3,6\,N$$

Redomen:

Molaridad (M) = 1,368 M
Molalidad (m) = 1,368 mol/kg
Porcentaje en masa: 7,27%.
Normalidad (N): 1,368 N