

## Difference

i-

concentration

\* concentration is amount of solute dissolved in a unit quantity (mass or volume) at a solution.

\* concentration is expressed as percent by weight, mole fraction, molarity etc.

solubility

solubility is the maximum amount of the solute that can be dissolved in a given amount of the solvent.

solubility is the ability of a solute to dissolve in a solvent at given temp. & pressure. It is expressed as grams/litres or moles/litres.

$$ii - \text{Concentration} = \frac{\text{mass at volume}}{\text{mass of solute}} \times 100$$

$$\Rightarrow \text{mass at volume} = x$$

$$\Rightarrow \frac{125}{10} = \frac{24}{x} \times 100$$

$$\Rightarrow \frac{125}{10} = \frac{2400}{x}$$

$$\Rightarrow 125x = 24000$$

$$\Rightarrow x = \frac{192}{\cancel{125}} \quad \left( \frac{24000}{125} \right)$$

$$\Rightarrow x = \underline{192}$$