

Percent By Volume / Volume Percent

$$\text{Volume Percent} = \frac{\text{Volume Solute}}{\text{Volume Solution}} \times 100 = \% \text{ v/v}$$

What is the percent by volume of ethanol in a solution that contains 35 mL of ethanol dissolved in 115 mL of water?

$$35 \text{ mL} \times \frac{1 \text{ L}}{1000 \text{ mL}} = 0.035 \text{ L ethanol}$$

$$115 \text{ mL} \times \frac{1 \text{ L}}{1000 \text{ mL}} = 0.115 \text{ L water}$$

$$\frac{0.035 \text{ L ethanol}}{0.150 \text{ L soln}} \times 100 = 23.3\% \text{ ethanol}$$