

## Answer on the question #58069, Chemistry / General Chemistry

### Question:

find the mole fraction of  $\text{CHCl}_3$  if 7.1 moles of  $\text{CHCl}_3$  is dissolved in 35.4 moles of water.

### Answer:

The mole fraction is the ratio of the number of the moles of the substance to total number of the moles:

$$x = \frac{n(\text{CHCl}_3)}{n_{\text{tot}}} \cdot 100\% = \frac{n(\text{CHCl}_3)}{n(\text{CHCl}_3) + n(\text{H}_2\text{O})} \cdot 100\% = \frac{7.1}{7.1 + 35.4} \cdot 100\% = 16.7\%$$