

- 36) What is the mole fraction of each component in a solution (fraction for the solute AND fraction for the solvent) made by mixing 300 grams of ethanol (C_2H_6O) and 500 grams of water?
- 37) A solution contains 50.0 grams of carbon tetrachloride (CCl_4) and 50.0 grams of chloroform ($CHCl_3$). Calculate the mole fraction of **each** component in the solution (both solute and solvent).
- 44) How many grams of sodium bromide must be dissolved in 400.0 grams of water to produce a 0.500 molal solution?
- 45) Calculate the mole fraction of each component (solute and solvent) in a solution of 2.50 mol ethanoic acid ($C_2H_5O_2$) in 10.00 mol of water.