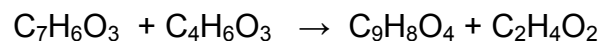


Answer each of the following questions as completely as possible showing all work and including all units.

Problem 1

You have 2g of $C_7H_6O_3$ and 4 g $C_4H_6O_3$ in the following reaction:



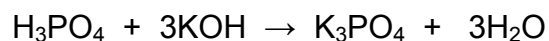
a) What is the limiting reactant?

b) How many grams of $C_9H_8O_4$ are produced?

c) If your actual yield of $C_9H_8O_4$ is 2.21g, what is your percent yield?

Problem 2

You have 49g of H_3PO_4 (which is the limiting reactant) in the following reaction:



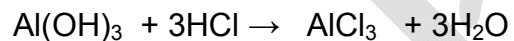
a) Determine the mole of the limiting reactant

b) Calculate the amount of K_3PO_4 (in grams) produced.

c) If your actual yield is 49g of K_3PO_4 , what is your percent yield?

Problem 3

You have 0.645 mole of $Al(OH)_3$ (which is limiting) in the following equation:



a) How many grams of $AlCl_3$ are produced in this reaction?

b) If the yield of $AlCl_3$ from the lab is 39.5g, what is the percent yield?