

For the calculations

#1 Find the molarity of NaOH

$$\text{— grams } \text{KHC}_8\text{H}_4\text{O}_4 \times \frac{1 \text{ mole}}{\text{molar mass}}$$

this gives you moles of $\text{KHC}_8\text{H}_4\text{O}_4$

mole ratio is 1 mole $\text{KHC}_8\text{H}_4\text{O}_4$ to 1 mole NaOH

then divide by the volume of NaOH added
to get the molarity of NaOH

#2

Take the volume in liters times
the molarity of NaOH to get moles
of NaOH.

Multiply by the molar mass of $\text{KHC}_8\text{H}_4\text{O}_4$

to get grams of $\text{KHC}_8\text{H}_4\text{O}_4$ in unknown

divide by total mass of unknown to
get percent mass

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