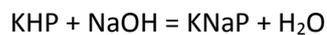


### Question #58936, Chemistry / General Chemistry

If 17.56 mL of NaOH were used to titrate a 0.840 gram sample of KHP, what is the molarity of the NaOH?

Solution:



KHP:

$$\text{MW} = 204.22 \text{ g/mol}$$

$$n_{\text{KHP}} = m/\text{MW} = 0.840 \text{ g}/204.22 \text{ g/mol} = 0.00411 \text{ mol}$$

$$n_{\text{NaOH}} = n_{\text{KHP}}$$

NaOH:

$$C_{\text{NaOH}} = n_{\text{NaOH}}/V_{\text{NaOH}} = 0.00411 \text{ mol}/17.56 \text{ mL} = 0.234 \text{ M}$$

Answer: 0.234 M