

Acid Neutralization Lab

Purpose:

- To find the molarity of a Hydrochloric Acid Solution by using the properties of neutralization.

Procedures:

- Using the plastic container, water, and the baking soda. Make a 1 molar solution of NaHCO₃.
- Mix in the universal indicator into the HCl acid solution.
- Record your observations
- Using the Pipette, extract small amounts of the NaHCO₃ solution and transfer it to the HCl solution.
- Record observations and amount of NaHCO₃ solution that was added to the acid solution.
- Repeat until Acid Solution is neutralized.

Conclusion and Analysis

- For the analysis, calculate the molarity of the HCl acid using the following formula.

$$\frac{\text{moles } H^+}{1 \text{ mole}_A} (M_A)(V_A) = \frac{\text{moles } OH^-}{1 \text{ mole}_B} (M_B)(V_B)$$

- Write a conclusion about your findings and what you learned about acids and bases from completing the Lab.