

PURPOSE

To test some of the properties of acetic acid.

EQUIPMENT test tubes

MATERIALS acetic acid granulated Mg metal granulated Zn metal 0.5M NaOH solution phenolphthalein

PROCEDURE

PART A: Reaction with Metals

1. Place 2ml of acetic acid into two test tubes.
2. Put a little amount of granulated Mg metal into the first test tube.
3. To the second test tube, add some granulated Zn metal.
4. If you can not observe reactions, heat the test tube.

QUESTIONS (Reactions of acetic acid)

1. During the preparation process, why did you add sulfuric acid solution drop by drop?
2. What happens, if filtration flask is not placed into the ice-salt bath?
3. Write all equations occurred during the preparation of acetic acid.

PART B: Reaction with Bases

1. Put 1-2ml of 0.5M NaOH solution into a test tube.
2. Add a few drops of phenolphthalein.
3. Add acetic acid solution to this mixture drop by drop. What do you observe?

QUESTIONS (Properties of acetic acid)

1. Compare the rates of reactions of acetic acid with Mg and Zn metal.
2. Write the equations occurred during the reactions of acetic acid.