

PURPOSE

To test some of the chemical properties of acetaldehyde.

EQUIPMENT	test tubes	water-bath
MATERIALS	acetaldehyde solid NaOH Fehling's solution	0.01M KMnO_4 ammoniacal AgNO_3

PROCEDURE

PART A: Reactions with KMnO_4 solution

1. Place 1ml of acetaldehyde in a test tube.
2. Add 1-2 drops of sulfuric acid and 1-2 drops of 0.01M KMnO_4 solution.
3. Observe the changes.

PART B: Reaction with Ammoniacal Silver Nitrate Solution

1. Put 5ml of ammoniacal silver nitrate solution in a test tube.
2. Add a little amount of NaOH and 2-3 drops of acetaldehyde.
3. Observe the changes.
4. If noting changes, heat the mixture in a water bath and observe the changes.

PART C: Reaction with Fehling's Solution

1. Put 3ml of Fehling's solution I in a test tube.
2. Add 3ml of Fehling's solution II in another test tube.
3. Add 2-3 drops of acetaldehyde to each of the test tube.
4. Observe the changes.

QUESTIONS

1. Write the equations for this experiment.