

provided :

Procedures for Different Identification Tests

2,4-Dinitrophenylhydrazine Test

Procedure:

1. In a test tube, add 2 mL of ethanol.
2. Add 5 drops of the Unknown and mix.
3. Add 2 mL of 2,4-dinitrophenylhydrazine reagent and shake well.
4. Record your observation and result.

Chromic Acid Oxidation Test

Procedure:

1. In a test tube, place 5 mL of Chromic Acid Reagent (1% potassium dichromate solution).
2. Add (up to 10 drops) of concentrated sulfuric acid (can be found in the fume hood).
3. Mix thoroughly and add 5 drops of the Alcohol and shake.
4. Record your observations and result. unknown

The Lucas Test

Procedure:

1. In a test tube, place 2 mL of Lucas' reagent (can be found in the fume hood).
2. Add 6 drops of the Alcohol. unknown
3. Close the tubes with a piece of parafilm.
4. Shake well.
5. If no change occurs immediately, then place in water bath at (100°C) for 5-13 minutes.
6. Record your observations and result.

Ferric Chloride Test

Procedure:

1. In a test tube, place 3 mL of water.
2. Add 5 drops of Phenol (can be found in the fume hood).
3. Add 1-2 drops of 1% ferric chloride solution.
4. Shake well and allow to stand for 1-2 minutes.
5. Record your observation and result.

The Iodoform Test

Procedure:

1. In a test tube, add 10-20 drops of iodine solution (or up to 1 mL).
2. Add 10 drops of the Alcohol.
3. Add 2-3 mL of 5% sodium hydroxide gradually.
4. Shake very well.
5. Allow to stand for 3-5 minutes (You might need to place it in a hot water bath to accelerate the oxidation).
6. Record your observation and result.

Tollens' Silver Mirror Test

Procedure:

1. In a test tube, add 3 mL of Tollens' reagent.
2. Add 3-4 drops of the Unknown and mix.
3. Shake the tubes vigorously and allow to stand for 10 minutes.
4. Place the tube in a hot water bath (50°C) for 3-5 minutes.
5. Record your observations.

Fehling's Test

Procedure:

1. In a test tube, add both 2 mL of Fehling's reagent A and 2 mL of Fehling's reagent B.
2. Add 3-5 drops of the Unknown.
3. Place the test tube in a beaker of boiling water for 15-20 minutes.
4. Record your observation and result.