

Experiment No.(3) Bial's test:

- Bial's test is a chemical test for the presence of pentose.
- This test is used to differentiate between pentose and hexose.
- The principle of the reaction is that pentose will be dehydrated to form furfural which then reacts with the orcinol to generate a colored substance. The solution will turn to green color.

Material:

1. Pentose solution (1%).
2. Bial's reagent (orcinol solution) is prepared by dissolving 0.25g orcinol solution in 125mL of 30% hydrochloric acid. 1mL of 10% FeCl_3 is then add to the solution. Keep the reagent in dark-brown colored flask.

Method:

1. Add 3mL of Bial's reagent in a test tube.
2. Add 15drops of pentose to the test tube and mix well.
3. Put the test tube in water bath; notice the appearance of green color.

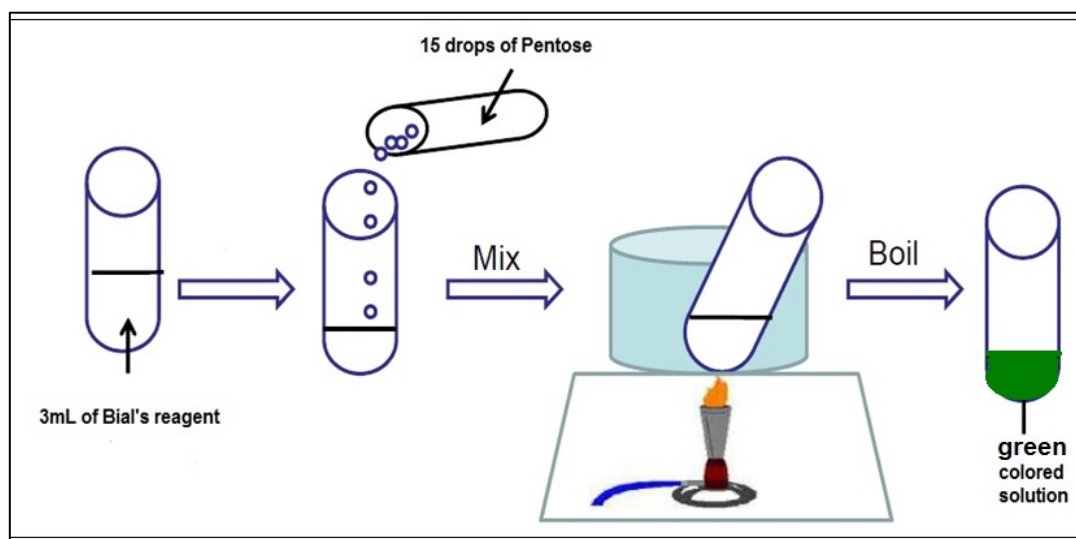


Figure 3. Procedure to Bial's test.