

Experiment No.(2) Seliwanoff test:

- Seliwanoff test is specific to Keto sugars (A ketose is a monosaccharide containing one ketone group per molecule $RC(=O)R'$ for example Fructose).
- When Fructose is heated with a Hydrochloric acid furfural derivative is formed. These derivatives yield a **red complex** when react with the organic compound resorcinol.

Material:

1. Fructose solution (0.5%).
2. Seliwanoff's reagent (dissolve 0.5g of resorcinol in 100mL of 20% hydrochloric acid).

Method:

1. Add 3mL of Seliwanoff's reagent in a test tube.
2. Add 0.5 mL of Fructose solution to the test tube and mix well for 5 minutes.
3. Put the test tube in water bath for less than 1 minute; notice the appearance of red color.
4. Red color complex form with fructose or any other keto sugar. Orange color may appear at the same time during the test due to Aldoses (An aldose contains only one aldehyde ($-CH=O$) group per molecule)

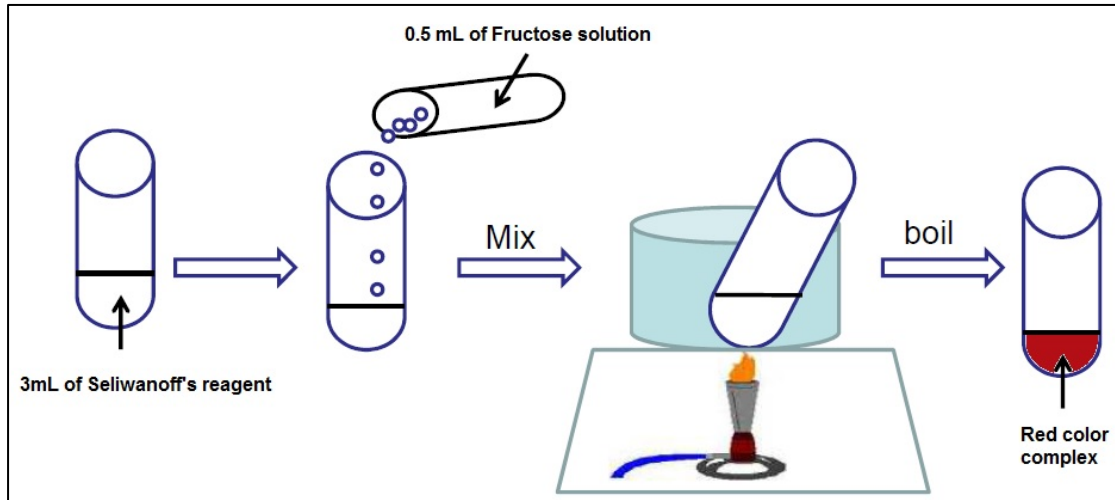


Figure 2. Procedure to Seliwanoff test.