

Experiment No.(7) Osazones formation test:

- Osazones formation test specific to reducing sugar (sugar having free carbonyl group C=O).
- The test involves the reaction of a reducing sugar with excess of phenyl hydrazine when kept at boiling temperature.
- All reducing sugars form osazones. Each sugar has a characteristic crystal form of osazones.

Material:

1. Carbohydrate solution (1-2%).
2. Phenylhydrazine powder.

Method:

1. Add 2mL of carbohydrate solution to a test tube.
2. Add phenylhydrazine powder to the carbohydrate solution until saturation is reached.
3. Mix the content of the test tubes well then put it in water bath and boil for 3 minutes.
4. Let the test tube cool at room temperature notice the formation of yellow crystals. Take a sample of the crystals and test it under a microscope.

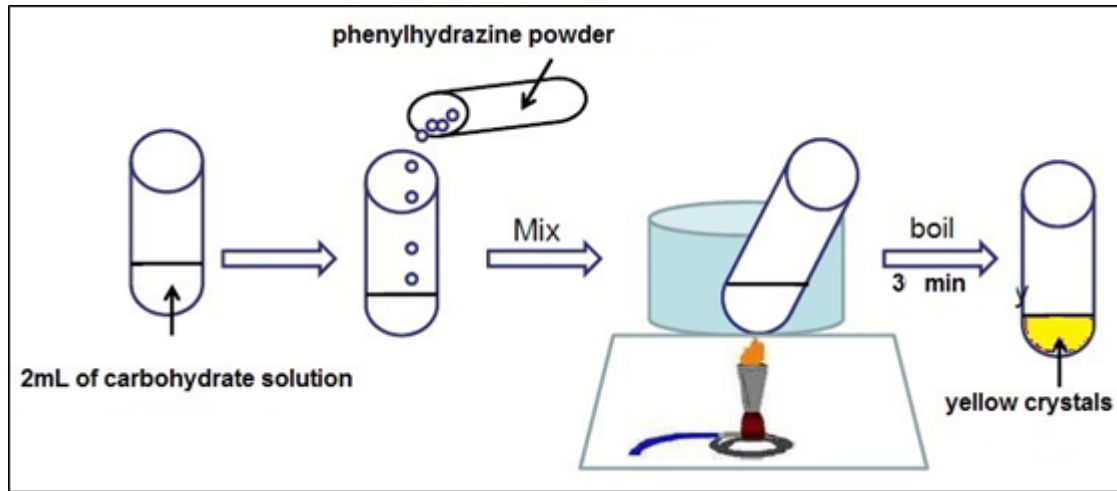


Figure 7. Procedure to Osazones formation test.