


Seliwanoff's Test:

Principle: Carbohydrates are dehydrated to form furfural derivative by hydrochloric acid present in Seliwanoff's reagent. Furfural derivative of ketosugar condenses with resorcinol to form a chromogen (cherry red color).

Seliwanoff's reagent: 50 mg of resorcinol in 33 ml of concentrated hydrochloric acid and diluted to 100 ml with water.

Experiment	Observation	Inference
Take 3 ml of Seliwanoff's reagent in a test tube; add 1 ml of given solution. Boil for 30 seconds and allow it to cool at room temperature.	Cherry red color is formed. 	Given solution is a ketosugar

Points to Remember:

- This test is specific for ketohexoses only.
- Useful in differentiating aldohexoses and ketohexoses.
- The test will be answered by fructose, sucrose and other fructose containing carbohydrates.
- This test is very sensitive even for 0.1% fructose. In the presence of glucose along with fructose sensitivity decreases.

Osazone test :

Importance and significance:

- To identify the reducing sugar that is excreted in the urine especially during the period of lactation. To differentiate glucose and lactose that is excreted in the urine.
- For standardizing and characterization of glucose.
- To differentiate lactose and maltose, which cannot be done by routine test.