

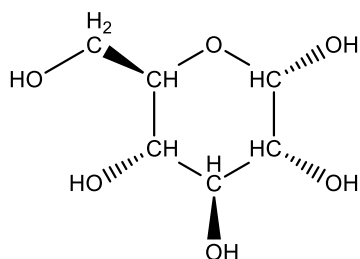
Answer on Question #51531 – Chemistry – Organic Chemistry

Question:

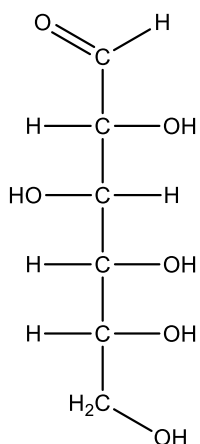
Schiff reagent explains why glucose is present in cyclic form but Tollen, Fehling, Benedict solution are not.

Answer:

Considering the structures of glucose it is clear that the open-chain form has an aldehyde group, which is sensitive to Schiff reagent as well as Tollen, Fehling, Benedict solutions. Therefore Schiff reagent does not interact with the cyclic form.



Cyclic form



Open-chain form

However, Tollen, Fehling, Benedict reagents being the oxidizing agents react with the both of isomers.