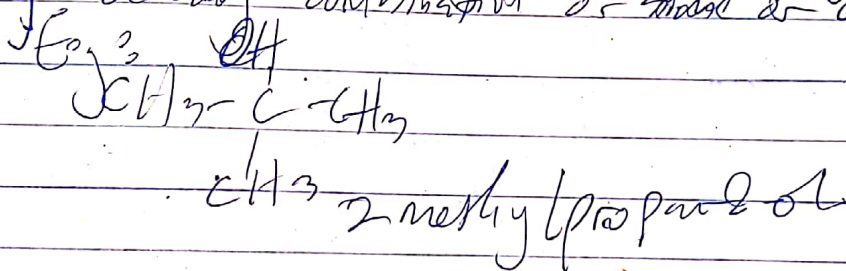


Name: Ugwuoke Chukwuebuka  
Matric: 16/ENG 06/069

1) Primary Alcohol: In a primary alcohol the carbon which carries the  $-OH$  group is only attached to one alkyl group. eg:  $CH_3-CH_2-OH$  (ethanol)

2) Secondary Alcohol: The carbon with  $-OH$  group attached is joined directly to two alkyl groups which may be the same or different. eg:  $CH_3-CH(OH)-CH_3$

3) Tertiary alcohol: The carbon atom holding the  $-OH$  group is attached directly to three alkyl groups which may be any combination or same or different.



2) Alcohols are soluble in water due to the hydrogen group in the alcohol which is able to form hydrogen bonds with water molecules. i.e. the smaller the hydrocarbon chain of an alcohol the more soluble it is.

3) Preparation of starch: The ~~raw~~ crushed space of starch is steamed at  $14^\circ C$  to  $150^\circ C$  under pressure. The prepared starch solution known as ~~starch~~ ~~starch~~

germination before hydrolysis, starch will first undergo germination at  $100^{\circ}\text{C}$  to  $150^{\circ}\text{C}$  for a few days. This germinated starch is called malt.

- Hydrolysis of starch: Starch is hydrolyzed by maltose by an enzyme known as diastase.

$$n(C_6H_{12}O_5) + nH_2O \rightarrow n(C_6H_{12}O_6)$$

Starch                      maltose

- Fermentation: Finally yeast is added to maltose, yeast secretes 2 enzymes.

1) Maltase: Converts Maltose to glucose

2) Zymase: Converts glucose to ethanol.

