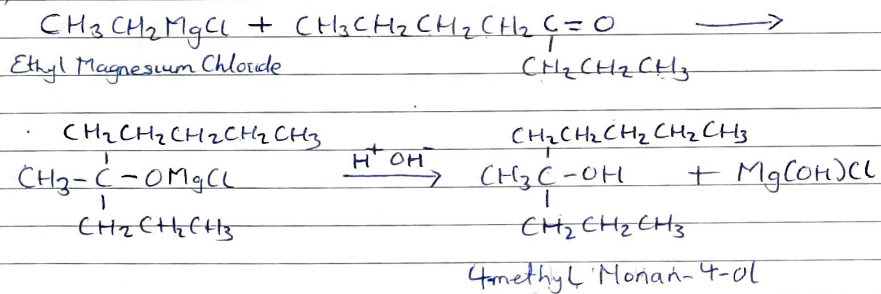


1) Alkanols can be classified based on two things;

a) They can be classified based on the number of hydroxyl groups attached to a carbon atom. In this case we have three categories; Monohydric, Dihydric and Polyhydric.

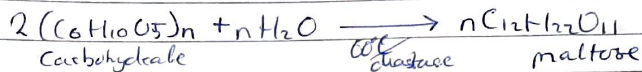
b) Secondly, they can be classified based on the number of hydrogen atoms attached to the same carbon atom having a hydroxyl group. In this case there are also three categories; Primary alcohols (2 or 3 hydrogen atoms), Secondary alcohols (1 hydrogen atom) and Tertiary alcohols (No hydrogen atom).

2)

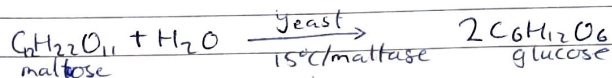


3) Industrially, Ethanol is prepared by the fermentation of carbohydrates by the action of enzymes bound in malt and yeast.

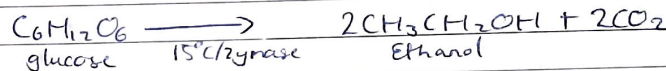
Firstly, Carbohydrates are decomposed by diastase from malt at 60°C to get maltose



Secondly, maltose is broken down by the action of maltase found in yeast which gives glucose at 15°C.

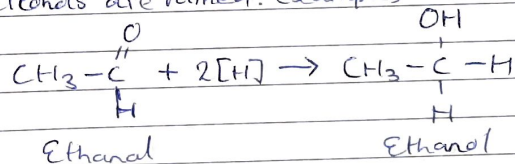


Thirdly, glucose is broken down to ethanol by the action of Zymase at 15°C.



4) For Alkanals

When alkanals are reduced, their corresponding primary alcohols are formed. Example;



For Alkanones

When Alkanones are reduced, their corresponding secondary alcohols are formed. Example;

