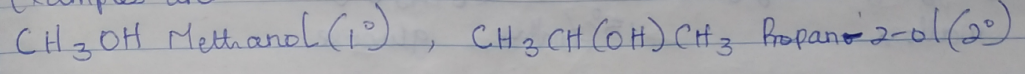


1) Two major classifications of Alcohols

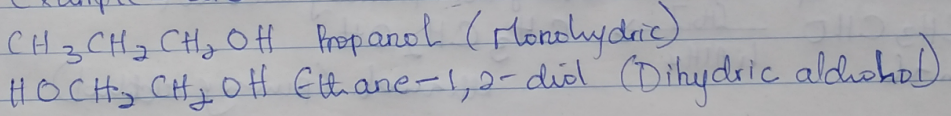
a. Based on the number of hydrogen atoms attached to the Carbon atom containing the hydroxyl group. If ~~one or~~ two or three hydrogen atoms are attached, it is called a primary alcohol (1°). If it is only one hydrogen atom, it is called a secondary alcohol (2°) and if none are attached, it is called a tertiary alcohol (3°).

Examples are:

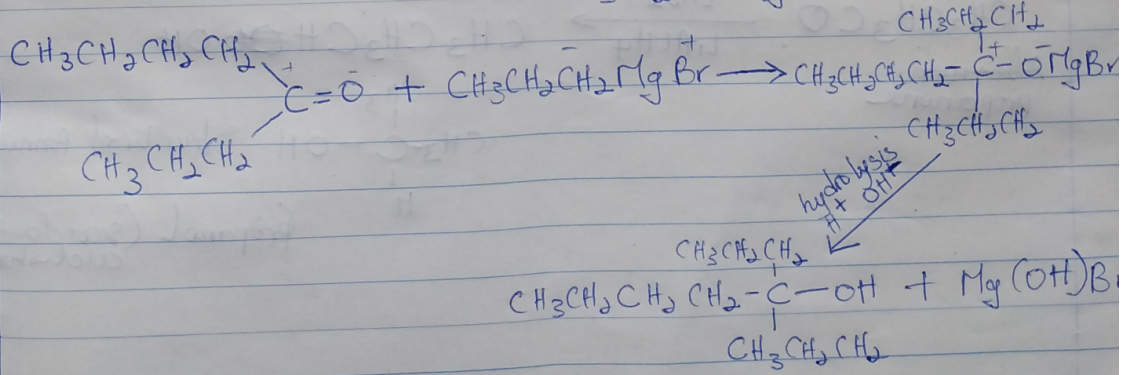


b. Based on the number of hydroxy groups they possess. Monohydric alcohols have one hydroxyl group present in the alcohol structure. dihydric alcohols (glycols) have 2 and trihydric alcohols (trials) have 3 and polyhydric alcohols (polyols) have more than 3 hydroxyl groups.

Examples are:

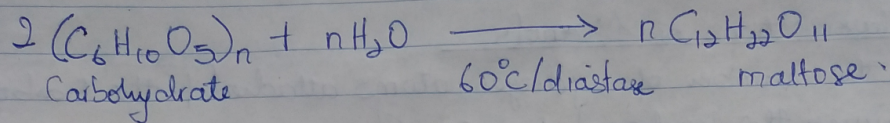


2. Named Grignard Reagent → Propyl magnesium bromide (CH₃CH₂CH₂MgBr)

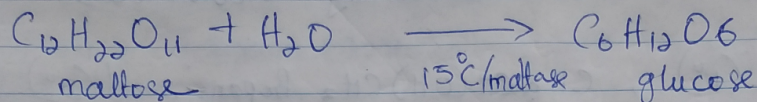


3. Industrial Manufacture of Alcohols (Fermentation)

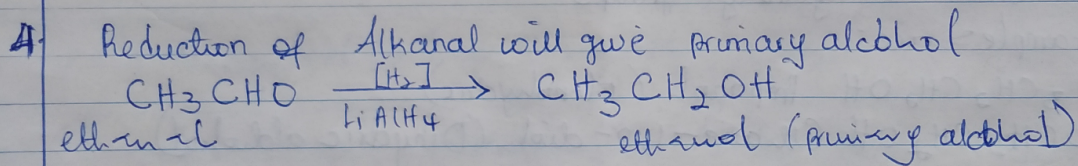
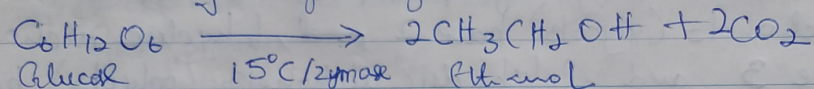
Starch containing materials are converted to maltose on warming to 60 with malt to 60°C by enzyme diastase in the malt.



The maltose is broken down by into glucose on addition of yeast which contains the enzyme maltase at a temperature of $15^\circ C$.



The glucose at constant temperature of $15^\circ C$ is then converted into alcohol by enzyme zymase also contained in the yeast.



Reduction of Alkanone will give secondary alcohol

