

## Assignment

1) Primary Alcohols: Primary alcohols are those alcohols where the carbon atom of the hydroxyl group (OH) is attached to only one group. The complexity of the alkyl chain is unrelated to the class of any alcohol considered as primary. The existence of only one or two primary -OH groups and an alkyl group and being that qualifies alcohol as a primary.

### Examples

1) Ethanol -  $\text{CH}_3 - \text{CH}_2 - \text{OH}$       2) Propan-1-ol  $\text{CH}_3\text{CH}_2 - \text{CH}_2 - \text{OH}$

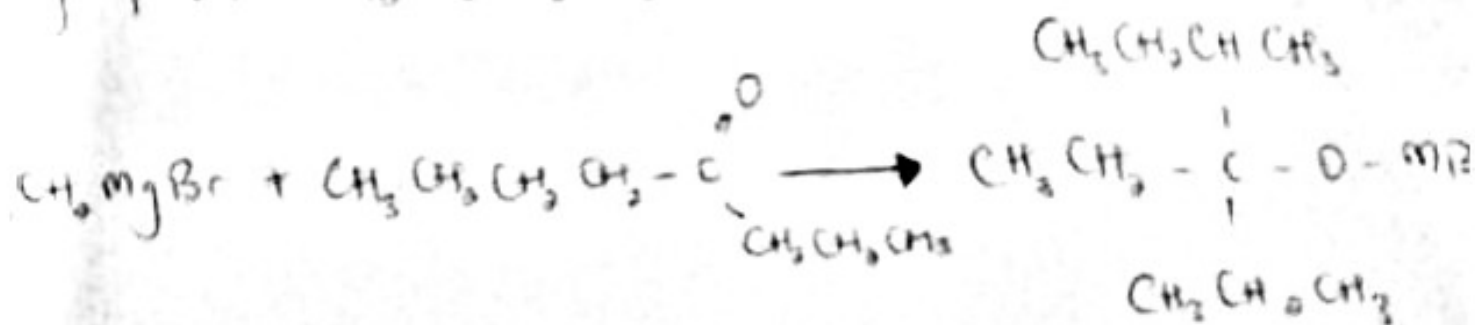
2) Secondary alcohols: Secondary alcohols are those where the carbon of the hydroxyl group is attached to two alkyl groups either side. The alkyl groups present may be either structurally or even different.

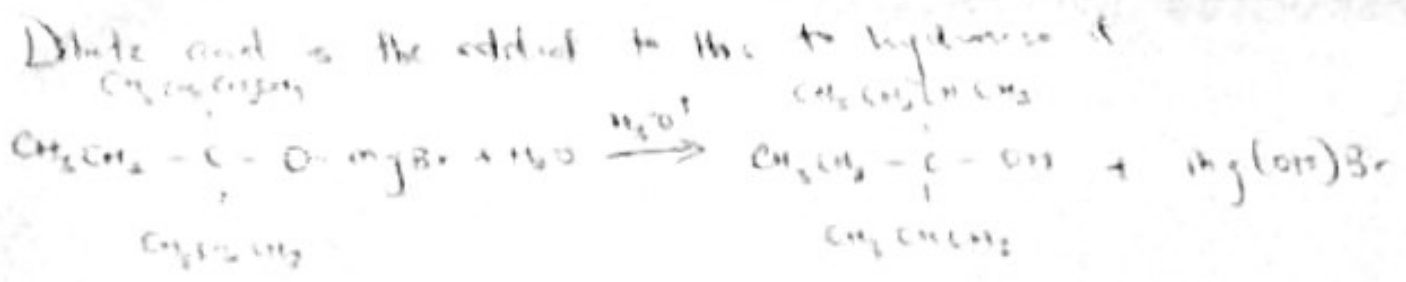
### Examples

1) Propan-2-ol  $\text{CH}_3 - \overset{\text{OH}}{\underset{|}{\text{C}}} - \text{CH}_3$

2) Butan-2-ol  $\text{CH}_3 - \overset{\text{OH}}{\underset{|}{\text{C}}} - \text{CH}_2 - \text{CH}_3$

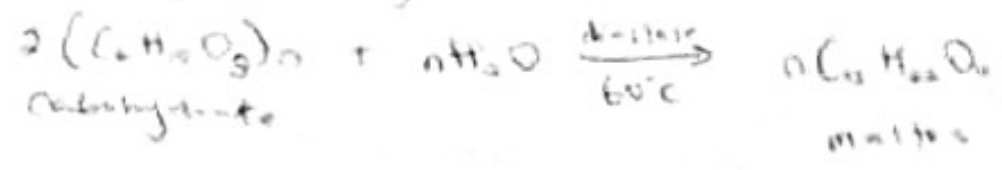
In the course of synthesis of alcohols, react a named Grignard reagent with  $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{C}(=\text{O})\text{CH}_2\text{CH}_3$



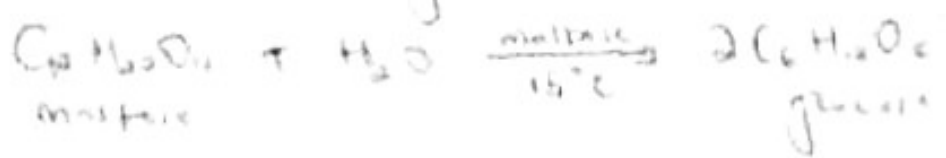


3) Distill

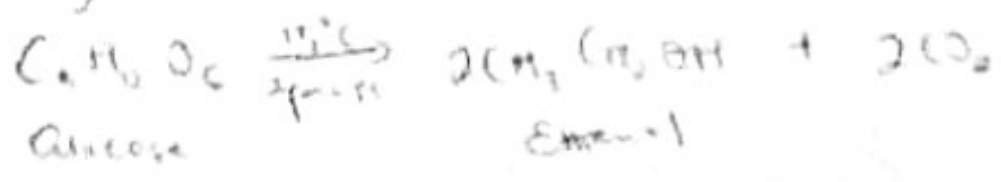
5) Firstly, the starch containing materials e.g. potatoes are washed with water to 60°C for a specified time. The starch is converted into maltose by the enzyme diastase contained in malt.



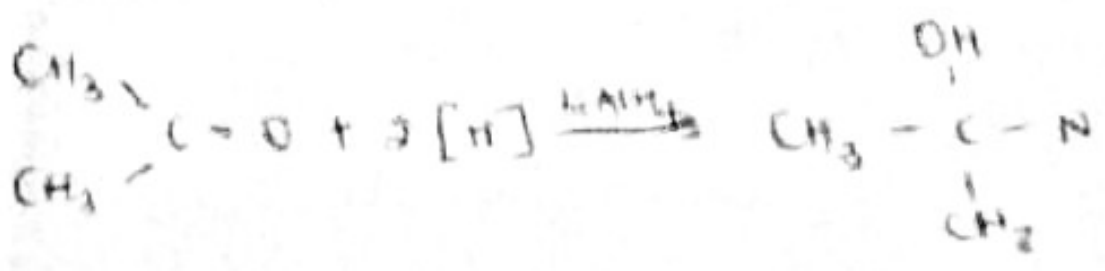
The maltose is broken down into glucose on addition of yeast which contains the enzyme maltase at 15°C



The glucose at constant 15°C is then converted into alcohol by enzyme zymase contained also in yeast.



Reduction of Acetone



Secondary alcohol

1) Reduction of Alkanal

