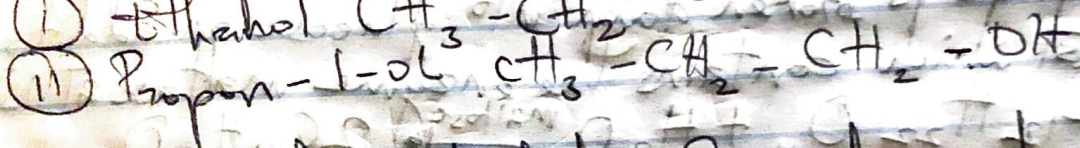


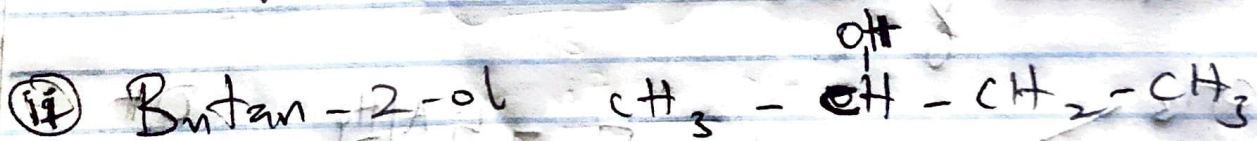
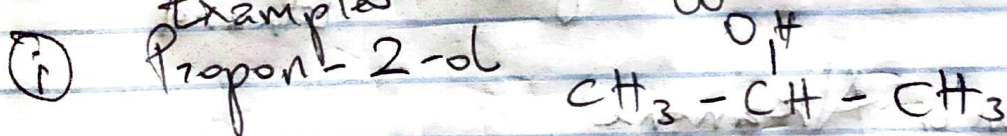
(a) Primary alcohols: Primary alcohols are those alcohols where the carbon atom of the hydroxyl group is attached to only one alkyl group. The position of the alkyl chain is unrelated to the classification of any alcohol considered as primary. The existence of only one linkage -OH group and an alkyl group and thing that qualifies alcohol as a primary

Examples

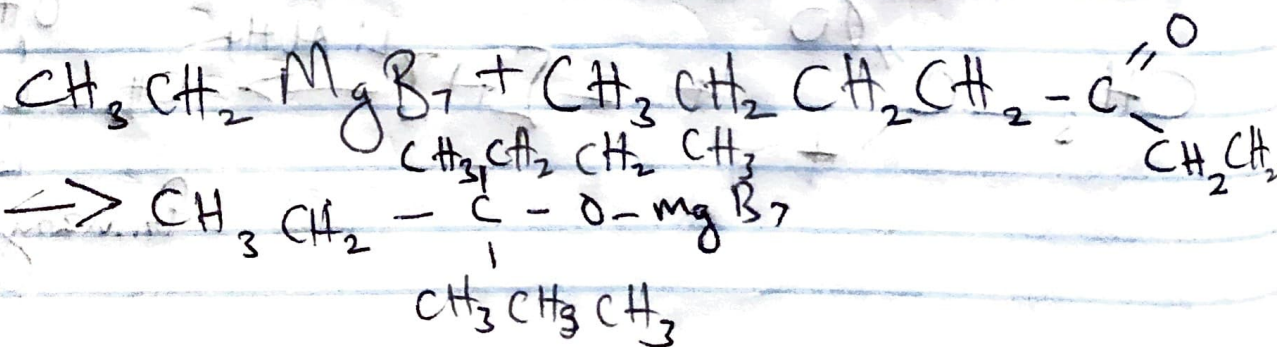


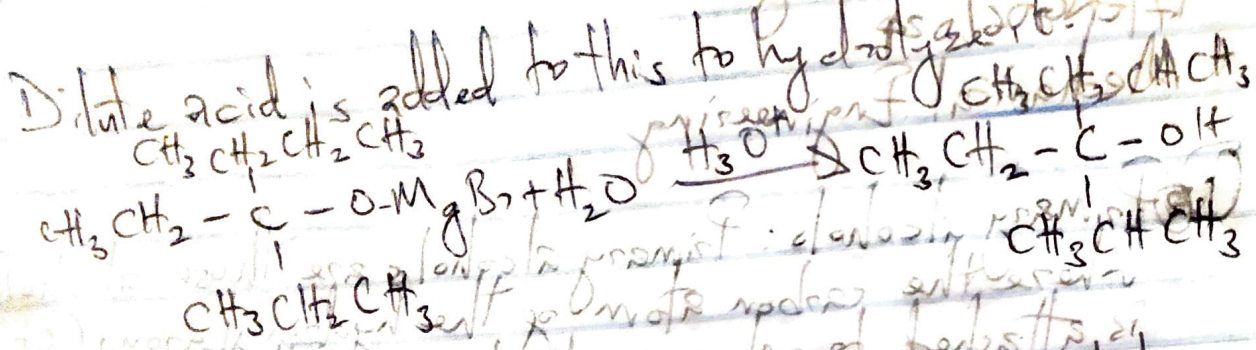
(b) Secondary alcohols: Secondary alcohols are those where the carbon atom of the hydroxyl group is attached to two alkyl groups on either side. The alkyl groups present may be either structural identical or even different

Examples



(2) In the Grignard synthesis of Alkanols, react a named Grignard reagent with $\text{CH}_3\text{CH}_2\text{CH}_2\text{CHO}$





③ Firstly, the starch containing materials (potatoes) are warmed with malt to 60°C for a specific time. The starch is converted into maltose by the enzyme diastase contained in malt.

$$2(\text{C}_6\text{H}_{10}\text{O}_5)_n + n\text{H}_2\text{O} \xrightarrow[60^\circ\text{C}]{\text{diastase}} n\text{C}_{12}\text{H}_{22}\text{O}_{11}$$

Maltose

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

$$\text{C}_{12}\text{H}_{22}\text{O}_{11} + \text{H}_2\text{O} \xrightarrow[15^\circ\text{C}]{\text{maltase}} 2\text{C}_6\text{H}_{12}\text{O}_6$$

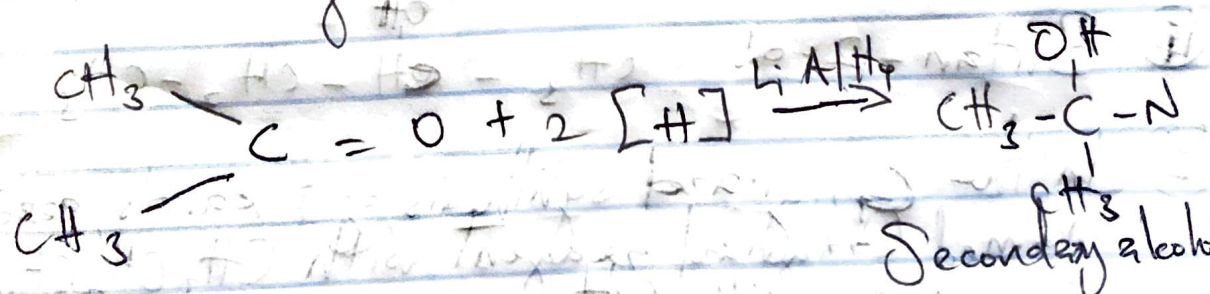
glucose

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

$$\text{C}_6\text{H}_{12}\text{O}_6 \xrightarrow[15^\circ\text{C}]{\text{zymase}} 2\text{C}_2\text{H}_5\text{CH}_2\text{OH} + 2\text{CO}_2$$

Ethanol

④ Reduction of Alkanone



Reduction of Alkanal

