

**NAME:OWOLABI DAVID**

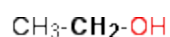
**COLLEGE:ENGINEERING**

**DEPARTMENT:MECHATRONICS**

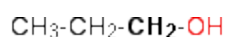
## **CHEMISTRY**

### **1)Primary alcohols**

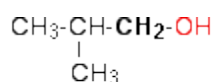
**In a primary (1°) alcohol, the carbon which carries the -OH group is only attached to one alkyl group. Some examples of primary alcohols include:**



ethanol



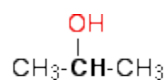
propan-1-ol



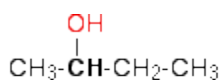
2-methylpropan-1-ol

### **Secondary alcohols**

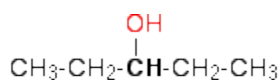
**In a secondary (2°) alcohol, the carbon with the -OH group attached is joined directly to two alkyl groups, which may be the same or different. Examples:**



propan-2-ol



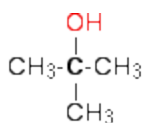
butan-2-ol



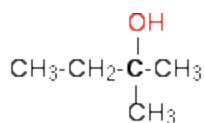
pentan-3-ol

### **Tertiary alcohols**

**In a tertiary (3°) alcohol, the carbon atom holding the -OH group is attached directly to three alkyl groups, which may be any combination of same or different. Examples:**



2-methylpropan-2-ol



2-methylbutan-2-ol

**2) Alcohols are soluble in water. This is due to the hydroxyl group in the alcohol which is able to form hydrogen bonds with water molecules. Alcohols with a smaller hydrocarbon chain are very soluble. As the length of the hydrocarbon chain increases, the solubility in water decreases.**

**4) 2-methylpropanal reacts with butylmagnesium chloride to give**

**CH<sub>3</sub>-MgI**

**O- MgI**

|

**H<sub>3</sub>C -----|-----CH<sub>3</sub>**

|

**CH<sub>3</sub>**

**What organic product would be formed by the reaction of CH<sub>3</sub>-I + Mg if the reaction was not anhydrous?**

**CH<sub>4</sub>**

**The CH<sub>3</sub>-MgI bond takes an H from H<sub>2</sub>O:**

**Forms: CH<sub>4</sub> and +MgI -OH**

**What byproduct would form in great abundance if dilution by ether didn't occur?**

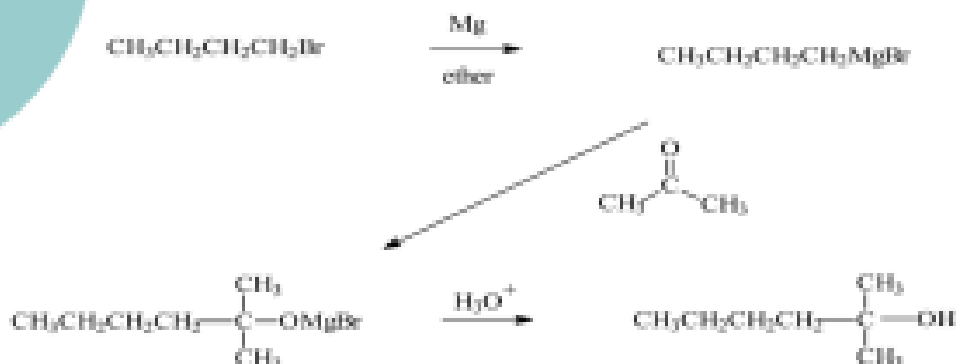
**CH<sub>3</sub>-I + Mg ----> ?**

**What is this reaction called?**



## Experiment 18:

### THE GRIGNARD REACTION



**5)**

**8) Dehydration of propan-1-ol to propene.**

**When propan-1-ol is treated with concentrated sulfuric acid the phenomenon called dehydration occurs due to which a water molecule from propan-1-ol gets eliminated.**

**Due to this propan-1-ol gets converted into propene. The reaction involved is as follows:**

**2. Hydrolysis of propene to propan-2-ol**

**Propene can be hydrolyzed to propan-2-ol in accordance with mechanism called as Markownikoffs addition.**

**It states that when an unsymmetrical reagent the negative part of the reagent gets attached itself to the carbon atom of the alkene which has less number of hydrogen atoms.**

**In this case, the unsymmetrical reagent used in which is composed of and part.**

**Due to hydrolysis of water, the negative part attaches itself to the propene and thus convert it as propan-2-ol.**

**The reaction involved is as follows:**

**Read more on Brainly.in -**

**<https://brainly.in/question/1004803#readmore>**