

Alcohols, Phenols and Ethers

SYNOPSIS

- * The group of compounds formed when one or more of the hydrogen atoms of hydrocarbons are replaced by Hydroxyl group/groups are called alcohols.
 - * Alcohols can be regarded as hydroxy derivatives of hydrocarbons.
 - * The general formula of the homologous series of monohydroxy alkanes is $C_nH_{2n+1}OH$ or $R-OH$ where R is alkyl group.
 - * Ethyl alcohol is called grain alcohol as it is obtained from starchy grains.
 - * The mother liquor left over after the extraction of sugar in sugar industry is called molasses.
 - * 95.6% ethyl alcohol is known as rectified spirit.
 - * The industrial alcohol or rectified spirit is denatured to make it unfit for drinking.
 - * Industrial methylated spirit which is 95% rectified spirit and 5% methyl alcohol.
 - * Ethyl alcohol forms a constant boiling mixture with water (Alcohol 95.6% and water 4.4%).
 - * Primary alcohol has more inter molecular force of attraction than in secondary alcohol, which has more than in tertiary alcohol.
 - * Dehydration of alcohols follows the following order.
Tertiary > Secondary > Primary
- 4. Two types of methylated spirits**
- a) Mineralized spirit = 90% rectified spirit + 9% methyl alcohol + 1% pyridine.
 - b) Surgical spirit = 95% rectified spirit + 5% MeOH.
- A mixture of conc. HCl and anhydrous $ZnCl_2$ is called Lucas reagent.