

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 have 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
- * Two types of methylated spirits:
 - a) mineralised spirit = 90% rectified spirit + 9% methyl alcohol + 1% pyridine
 - b) Surgical spirit = 95% rectified spirit + 5% MeOHA mixture of conc. HCl and anhydrous $ZnCl_2$ is called Lucas reagent