

NAME: RUMMANUN FATIHAH

Matric No: 191MHS11129

DEPARTMENT: PHARMACY

COURSE CODE:

- 1)
- a) CH_3OCH_3 : Methoxy methane
 - b) $\text{CH}_3(\text{CH}_2\text{OCH}_2\text{CH}_2)\text{CH}_3$: Ethoxy ethane
 - c) $\text{CH}_3\text{CH}_2\text{CH}_2\text{OCH}_3$
 - d) $\text{CH}_3\text{CH}_2\text{OCH}_3$: Ethoxy methane
 - e) $\text{CH}_3(\text{CH}_2\text{CH}_2\text{OCH}_2\text{CH}_2)\text{CH}_3$
 - f) $\text{CH}_3\text{CH}_2\text{CH}_2(\text{CH}_2)_2\text{O}$: Butoxy methane

2) Properties of Ethers

a) Physical states: Ethers are colourless, neutral liquid with pleasant odours at room temperature. Lower aliphatic ethers are highly flammable, gas or volatile liquid.

b) Solubility: ethers are less soluble in water than the corresponding alcohols. Lower molecular weight ethers are fairly soluble in water.

Density: Increases with increasing relative molecular mass. Simple ethers are less than water

4) Uses of Ethylene Oxide.

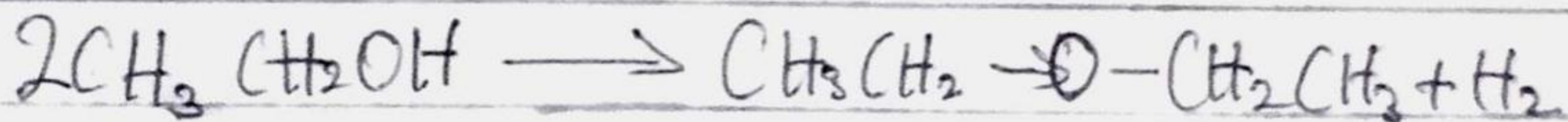
i) As a gaseous sterilising agent

ii) As an intermediate in the hydrolytic manufacture of ethylin glycol

iii) Used in the manufacture of products like glycol.

Two methods of preparing ethers and their equation of reaction

1) Partial dehydration of alcohols: Simple ethers are prepared by catalytic dehydration of manufactured alcohols by a process called esterification in excess alcohol or high temperature as high as $(170-180)^{\circ}\text{C}$



2) From the alkanes and dry silver (I) oxide: Ethers can be prepared by heating alkanes with dry silver oxide

