Name: Olaosebikan Oluwademilade Deborah
Matric No: 19/17HS01/331
Dept: MBBS

(1) CH_3OCH_3: Methoxymethane
$CH_3CH_2OCH_2CH_3$: Ethoxyethane
$CH_3CH_2OCH_3$: Ethoxymethane
$CH_3CH_2CH_2OCH_2CH_3$ Propoxyethane
$(CH_3CH_2CH_2CH_2)_2O$: Butoxymethane

Properties of ethers

(1) Physical State: Ether are colourless, neutral liquid with pleasant odors at room temperatures: Lower aliphatic ethers are highly flammable gas or volatile liquid.

2 Solubility: Ether are less soluble in water than corresponding alcohol, lower molecular weight ether are fairly soluble in water

3 Boiling Point: Lower molecular mass either have a lower boiling point than corresponding alcohol while ether containing alkyl radicals larger than 4 carbon atom have a higher boiling point

(4) Reactivity: Ether are reactively at moleaub temperature and such leads to their wide use as reactive media

(5) Density: Increases with increasing relative molecular mass: Simple ether are less than water

(4) Uses of ethylene oxide

1 As a geasous sterlizing agent
2 As an intermediate in the hydroly tramanufacture of ethylene glycols
3 used in the manufacture of Product like glycol

3 Two method of preparing ether and their equation of reaction

(1) Parcial dehydragonation of alchol.
Simple ether are prepared by catalytic dehydration of manufactured alcohol by a process called esterification in excoss alchol or high temperature as high as 170 — 180°C

$$2CH_3CH_2OH \xrightarrow[140^\circ C]{Conc\ H_2SO_4} CH_3CH_2-O-CH_2CH_3 + H_2$$

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

$$2CH_3CH_2CH_2Cl + Ag_2O \xrightarrow{heat} CH_3CH_2CH_2OCH + 2AgCl$$