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- 1a)Methoxymethane
- b) Butoxymethane
- c) Ethoxypropane
- d) Ethoxyethane
- e) Methoxyethane
- 2) Physical States: At room temperature, ethers are colourless, neutral liquids with pleasant odours. The lower aliphatic ethers are highly flammable gases or volatile liquids.

Solubility: Ethers are less soluble in water than are the corresponding alcohols. Lower molecular weight ethers such as methoxymethane and methoxyethane are fairly soluble in waater since the molecules are able to form hydrogen bonds with the water molecules but as the hydrocarbon content of the molecules increases, there is a rapid decline in solubility. They are miscible with most organic solvents.

Density: Most of the simple ethers are less dense than water, although the density increases with increasing relative molecular mass and some of the aromatic ethers are in fact denser than water.

Reactivity: Ethers are inert at moderate temperature. Their inertness at moderate temperatures leads to their wide use as reaction media.

3)Partial dehydration of alcohols: Simple ethers are manufactured from alcohols by catalytic dehydration. The alcohol in excess and concentrated tetraoxosulphaate(vi) acid is heated at a carefully maintained temperature of 140degrees Celsius.

2ROH ----- R-O-R + H2O

Controlled catalytic hydration of olefins

2CH3CH=CH2 + H20 ----- (CH3)2CH-O-CH(CH3)2

2-isopropoxypropane

4) It is used as a fumigant in certain agricultural products

It is used as a sterilant for medical equipments and supplies

It is used as an accelerator of maturation of tobacco leaves and fungicides