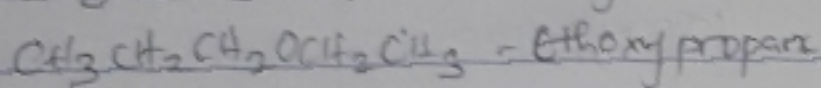
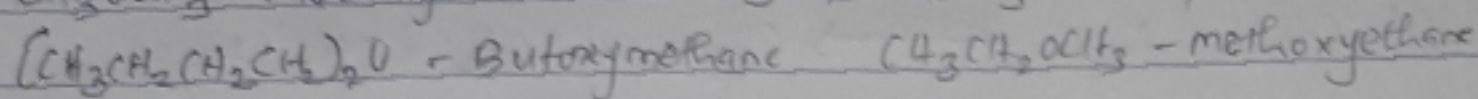
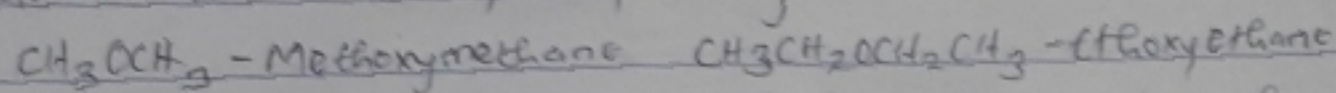


1 Give the IUPAC names of the following



2 Properties of ethers are

1 Physical States: At room temperature, ethers are colourless, neutral liquids with pleasant odours. The lower aliphatic ethers are highly flammable gases or volatile liquids.

2 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.

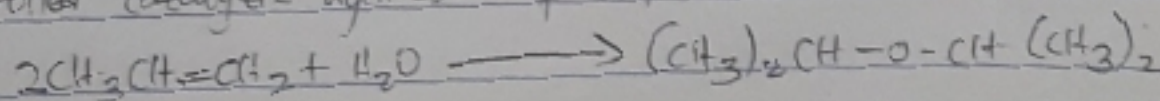
3 Solubility: Ethers are less soluble in water than are the corresponding alcohols. Lower molecular weight ethers such as methoxymethane and methoxyethane are fairly soluble in water.

4 Boiling point: Low molecular mass ethers have a lower boiling point than the corresponding alcohols but those ethers containing alkyl radicals larger than four carbon atoms, the reverse is true.

5 Reactivity: Ethers are inert at moderate temperature. Their inertness at moderate temperatures leads to their wide use as reaction media. Simple ethers are not found commonly in nature but the ether linkage is present in such natural products as sugars, starches and cellulose.

3 Methods of preparation of ethers

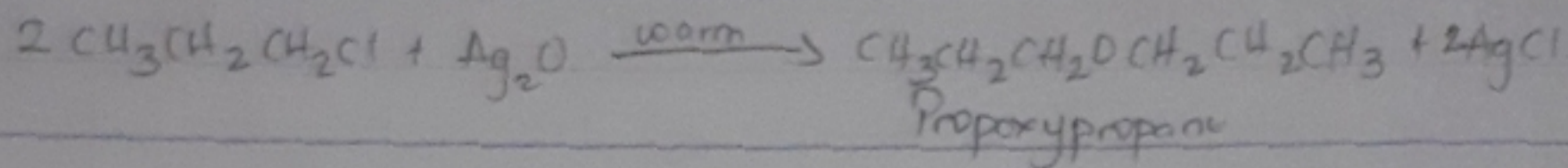
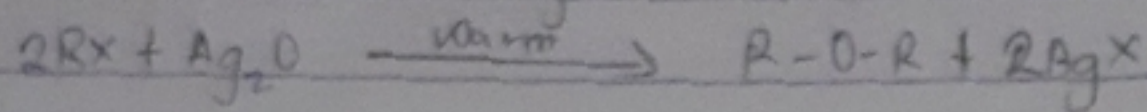
1 Controlled catalytic hydration of olefins



2 - isopropoxypropane



ii from Haloalkanes and dry Silver(I) oxide



4 Uses of ethylene oxide

- i Ethylene oxide is used as an intermediate in the hydrolytic manufacture of ethylene glycol
- ii Ethylene oxide is used in the preparation of non-ionic emulsifying agents, plastics, plasticizers and several synthetic textiles
- iii Ethylene oxide is used as gaseous sterilizing agent