

NAME: ADELEKE BLESSING OLUWAKEMI

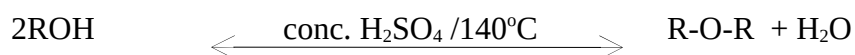
COLLEGE/DEPT: MHS/MBBS

COURSE CODE: CHM 102

MATRIC NO: 19/MHS01/030

ASSIGNMENT ON ETHERS.

- 1) (i) methoxymethane (iv) ethoxyethane  
(ii) butoxymethane (v) methoxyethane  
(iii) ethoxypropane
- 2) (i) 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.  
(ii) physical states: at room temperature, ethers are colorless, neutral liquids with pleasant odours.  
(iii) solubility: ethers are less soluble in water than are the corresponding alcohols. They are miscible with most organic solvents.
- 3) (i) partial dehydration of alcohols: simple ethers are manufactured from alcohols by catalytic dehydration. The alcohol in excess and concentrated tetraoxosulphate(vi) acid is heated at a carefully maintained temperature of 140 degree Celsius. This process is known as continuous etherification. If excess alcohol is not used, the temperature is as high as 170-180 degree Celsius, further dehydration to yield alkene occurs.



(ii) controlled catalytic hydration of olefins



- 4) (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 emulsify agents, plastics, plasticizers and several synthetic textiles.  
(iii) ethylene oxide is used as a gaseous sterilizing agent.

