

Agudasy Steven

19/ENG004/003

CHM102

1a CH_3OCH_3 - Methoxymethane

$\text{CH}_3\text{CH}_2\text{OCH}_2\text{CH}_3$ - Ethoxyethane

$(\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2)_2\text{O}$ - Ethoxypropane

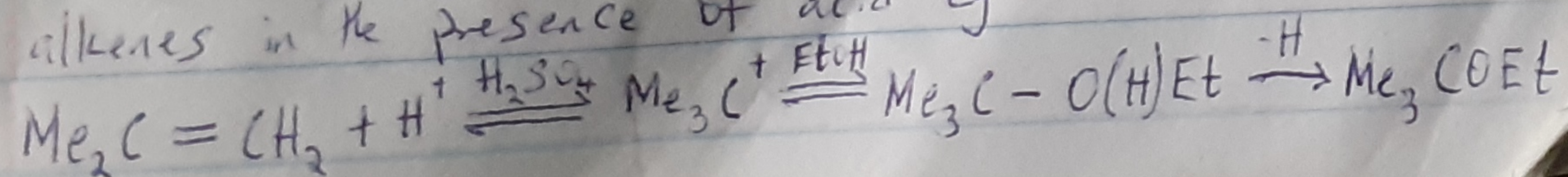
$\text{CH}_3\text{CH}_2\text{OCH}_3$ - Ethyl methyl ether / Methoxyethane

$\text{CH}_3\text{CH}_2\text{CH}_2\text{OCH}_2\text{CH}_3$ - Ethyl propyl ether

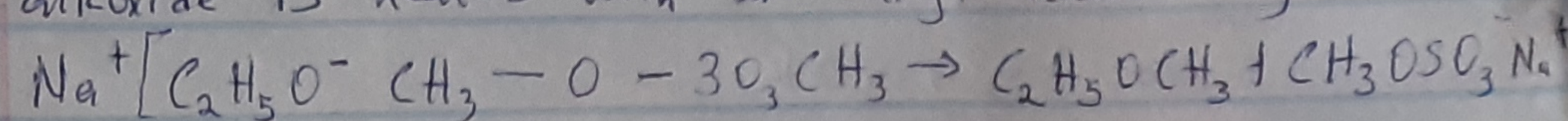
properties of esters

The lower members of esters are gases or volatile liquid and their vapours are highly inflammable. Their boiling point is lower than those of the alcohols containing the same number of carbon atoms. Esters are less dense than water and are not very soluble, but their solubility is very much increased in the presence of small amounts of alcohol.

3 Esters can be prepared by addition of alcohols to alkenes in the presence of acid eg



Esters are produced when sodium or potassium alkoxide is heated with an alkyl halide. Eg



4 Esters are used for the following

- As an organic solvent
- For explosives (Nitrate esters)
- Polyesters are used to make plastics
- To manufacture detergents etc.