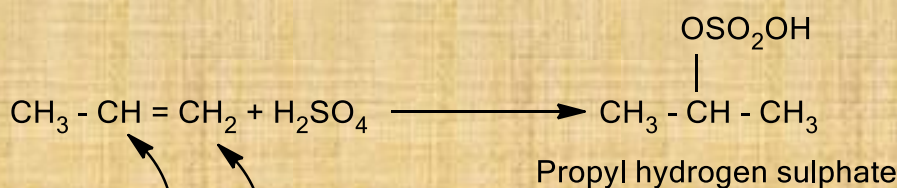


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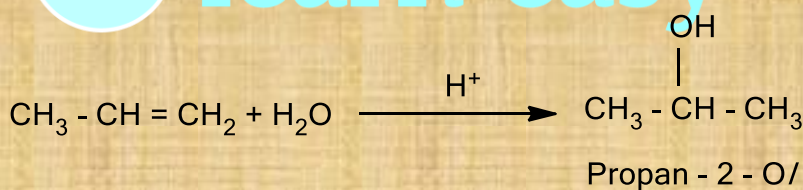
HYDROCARBONS

Chemical properties of alkenes:
Addition of sulphuric acid:

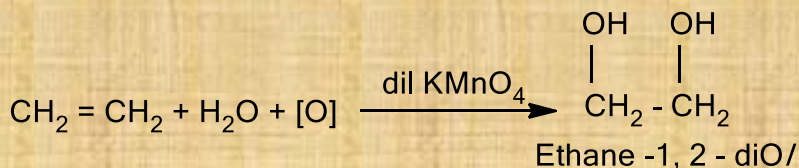
Cold concentrated sulphuric acid adds to alkenes according to Markovnik's rule to give alkyl hydrogen sulphate.


Addition of water:

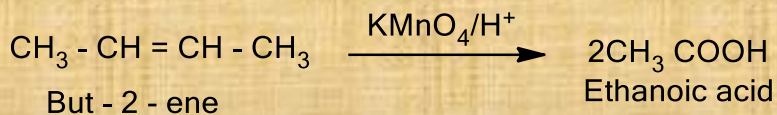
Alkenes react with water in presence of dil. H_2SO_4 to give alcohols.


Oxidation:

Alkenes on reaction with alkaline cold. Dilute KMnO_4 gives glycols.

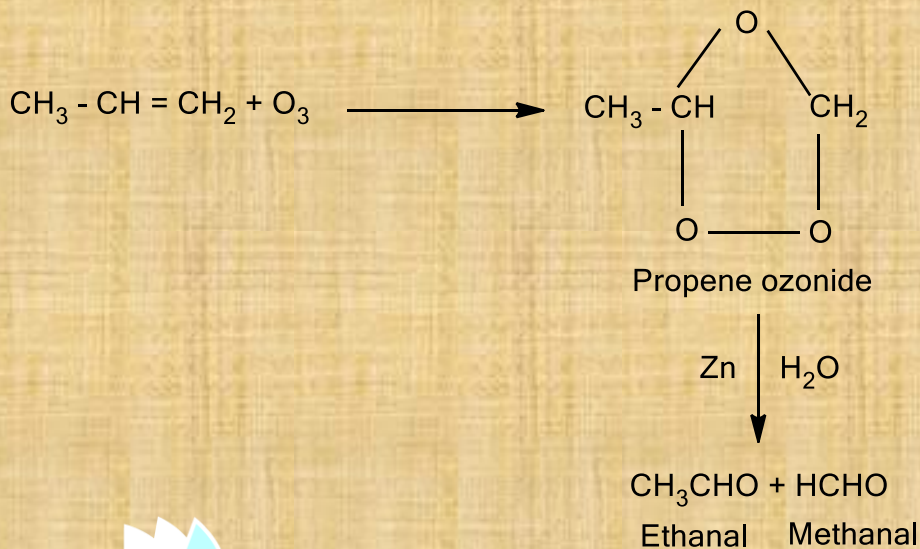


Alkaline are oxidised to ketones or acids on oxidation with acidified KMnO_4 (Potassium per manganite).



Ozonolysis:

Alkenes gets added to ozone molecule to form ozonoid, which on treatment with zinc, hydrolysis forms aldehydes or ketones.



Above reaction is used for detecting position of double bond.

Polymerisation:

Alkenes undergo polymerization at high temperature and pressure to form long linear chains of polymer molecules.

