

IGCSE Chemistry (9-1) Specification 4(e)

(e) Alcohols

Students should:

4.29C know that alcohols contain the functional group -OH

4.30C understand how to draw structural and displayed formulae for methanol, ethanol, propanol (propan-1-ol only) & butanol (butan-1-ol only), and name each compound
the names propanol and butanol are acceptable

4.31C know that ethanol can be oxidised by:

- burning in air or oxygen (complete combustion)
- reaction with oxygen in the air to form ethanoic acid (microbial oxidation)
- heating with potassium dichromate(VI) in dilute sulfuric acid to form ethanoic acid

4.32C know that ethanol can be manufactured by:

- reacting ethene with steam in the presence of a phosphoric acid catalyst at a temperature of about 300°C and a pressure of about 60-70atm
- the fermentation of glucose, in the absence of air, at an optimum temperature of about 30°C and using the enzymes in yeast

4.33C understand the reasons for fermentation, in the absence of air, and at an optimum temperature