Oxford Cambridge and RSA

AS Level Chemistry A

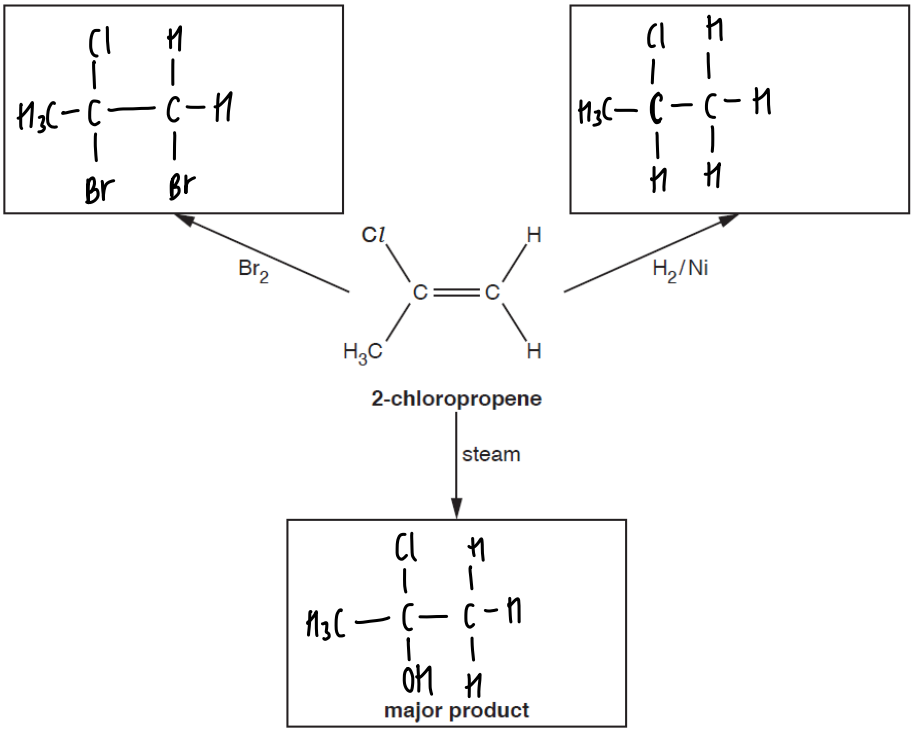
H032/01 Breadth in chemistry

Question Set 8

1. This question is about 2-chloropropene, C_3H_5Cl.

(a) Three reactions of 2-chloropropene are shown in the flowchart below.

(i) Complete the flowchart to show the organic products formed in the reactions.



[3]

(ii) The reaction of 2-chloropropene with steam requires a catalyst.

State a suitable catalyst for this reaction. concentrated sulfuric acid

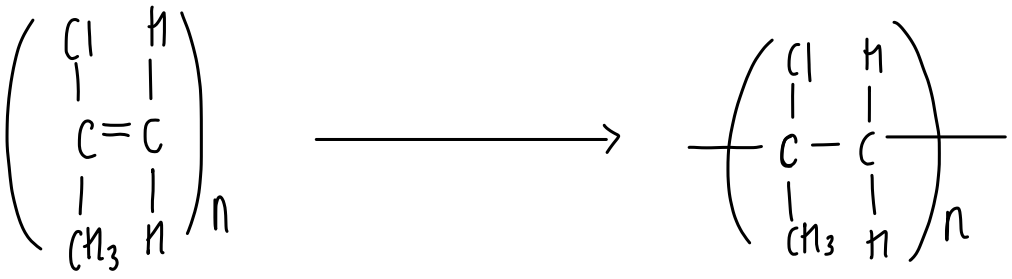
[1]

(b) 2-Chloropropene can be polymerised to form poly(2-chloropropene).

(i) Write a balanced equation for the formation of this polymer.

The equation should include the structure of the repeat unit of the polymer.

[2]



[2]

(ii) After their useful life, waste polymers can be disposed of by combustion.

State **one** particular problem with disposal of poly(2-chloropropene) by combustion.

produces chlorine gas which is toxic

[1]

Total Marks for Question Set 8: 7