

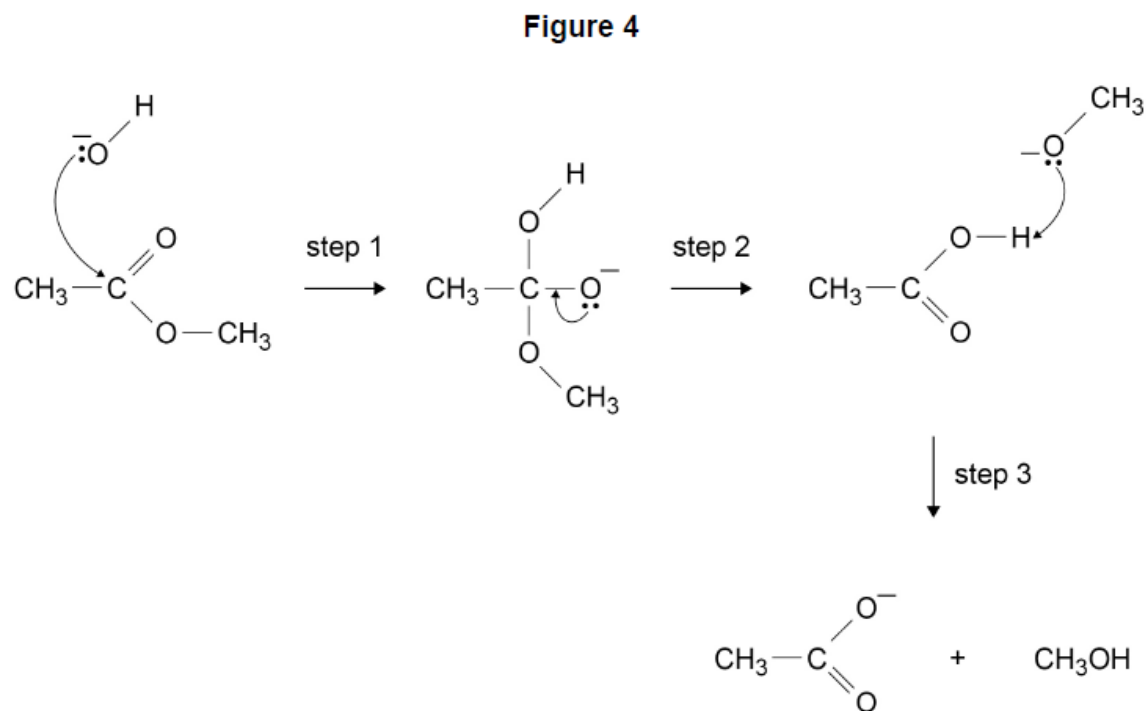
Carboxylic acids and derivatives – A2 2022 Chemistry P2&P3

1. June/2022/Paper_7405/2/No.7

0 7

This question is about esters.

Figure 4 shows an incomplete mechanism for the reaction of an ester with aqueous sodium hydroxide.



0 7 . 1

Add **three** curly arrows to complete the mechanism in **Figure 4**.**[3 marks]**

0 7 . 2

Name the type of reaction shown in **Figure 4**.**[1 mark]**

0 7 . 3

Deduce the role of the CH_3O^- ion in step 3 shown in **Figure 4**.**[1 mark]**

0 7 . 4

A triester in vegetable oil reacts with sodium hydroxide in a similar way.

Give a use for a product of this reaction.

[1 mark]

2. June/2022/Paper_7405/3/No.25

Which compound is an isomer of ethyl ethanoate?

[1 mark]

A butyl methanoate

B methyl propanoate

C methyl butanoate

D propanoic acid