

Question 22 (6 marks)

A student prepared the compound methyl propanoate in a school laboratory.

- (a) Give a common use for the class of compounds to which methyl propanoate belongs. **1**

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- (b) In the preparation of this compound a few drops of concentrated sulfuric acid were added to the starting materials. The mixture was then refluxed for a period of time. **2**

Why was it necessary to reflux the mixture?

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- (c) Name the TWO reactants used in preparing the methyl propanoate and draw their structural formulae. **3**

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