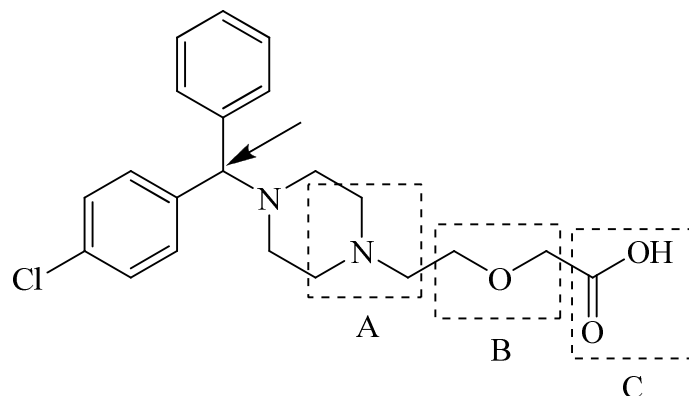


Marks
5

- The structure of the antihistamine, Zyrtec™, is given below.



What is the name of the functional group in Box A?

Amine (tertiary)

What is the name of the functional group in Box B?

Ether

What is the name of the functional group in Box C?

Carboxylic acid

By drawing an arrow on the structure above, clearly indicate the stereocentre in the structure of Zyrtec.

Draw the product of the reaction when Zyrtec is treated with LiAlH_4 followed by dilute acid.

LiAlH_4 will reduce the carboxylic acid all the way to an alcohol.

