

Question 33

(8 marks)

Ethanol ($\text{C}_2\text{H}_5\text{OH}$) dissolves readily in water, while decan-1-ol ($\text{C}_{10}\text{H}_{21}\text{OH}$) has very limited solubility. Explain, with the aid of labelled diagrams, why ethanol is able to dissolve in water and decan-1-ol is not.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.