

Question 17 (3 marks)

Explain why alkanes and their corresponding alkenes have similar physical properties, but very different chemical properties.

3

Alkanes and their corresponding alkenes have similar physical properties due to the nature of their bonds, i.e. both are bonded by dispersion forces meaning that as chain length increases, so does the boiling and melting points. However, alkanes are saturated and alkenes are unsaturated meaning that alkenes are more reactive. ~~Show~~ This shows the difference in chemical properties.