

(iii) Suggest why the mean bond enthalpy of a C=C bond is less than twice the mean bond enthalpy of a C—C bond.

(1)

(iv) Use the mean bond enthalpy data in the table, and the equation given below, to calculate a value for the standard enthalpy change of combustion of propene.

(3)

Bond	Mean bond enthalpy / kJ mol ⁻¹
C=C	612
C—C	347
C—H	413
O=O	498
C=O	805
O—H	464



Answer = _____ kJ mol⁻¹



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D Keegan



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