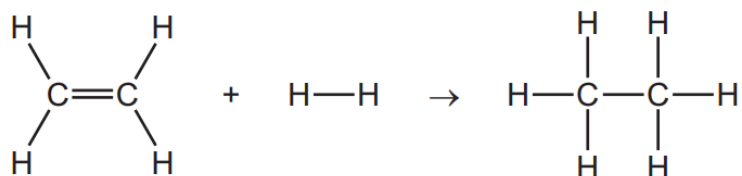


ENTHALPY CHANGE CALCULATION

- 1 Ethene reacts with hydrogen to form ethane.

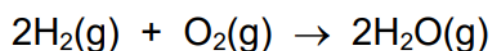


The bond energies are shown in the table.

bond	bond energy in kJ/mol
C-C	+350
C-H	+410
H-H	+436
C=C	+614

What is the energy change for the reaction?

- A -290 kJ/mol
B -120 kJ/mol
C +120 kJ/mol
D +290 kJ/mol
- 2 The reaction between hydrogen and oxygen releases 486 kJ/mol of energy.



The bond energy of H-H is 436 kJ/mol and that of H-O is 464 kJ/mol.

What is the bond energy of O=O?

- A 430 kJ/mol
B 458 kJ/mol
C 498 kJ/mol
D 984 kJ/mol