bond energy (mean bond energy)

The average value of the gas-phase bond dissociation energies (usually at a temperature of 298 K) for all bonds of the same type within the same chemical species. The mean bond energy for methane, for example, is one-fourth the enthalpy of reaction for:

\[
\text{CH}_4(g) \rightarrow \text{C}(g) + 4\text{H}(g)
\]

Tabulated bond energies are generally values of bond energies averaged over a number of selected typical chemical species containing that type of bond.

Source:
PAC, 1994, 66, 1077 (Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)) on page 1090