An addition is a reaction in which two reactant molecules react with each other giving one product molecule. A typical addition reaction has the following general equation:

\[ A + B \rightarrow C \]

eg. 1:

\[
\begin{array}{c}
\text{CH}_2=\text{CH}_2 \\
\text{H}_2\text{C} = \text{CHCl}
\end{array}
\]

eg. 2:

\[
\begin{array}{c}
\text{CH}_2=\text{CH}_2 \\
\text{H}_2\text{C} = \text{OH}
\end{array}
\]

eg. 3:

\[
\begin{array}{c}
\text{CH}_2=\text{CH}_2 \\
\text{H}_2\text{C} = \text{CO}_2\text{Me}
\end{array}
\]

In an intramolecular addition two functional groups in the same reactant molecule reacts with each other to give one product molecule.

eg:

\[
\begin{array}{c}
\text{CH}_2=\text{CH}_2 \\
\text{H}_2\text{C} = \text{CO}_2\text{Me}
\end{array}
\]

Contributors

- Gamini Gunawardena from the OChemPal site (Utah Valley University)