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:

\[ \text{\begin{tikzpicture}[baseline=(current bounding box.center)]
    \node[draw] (a) at (0,0) {\text{\textit{\texttt{C}}}};
    \node[draw] (b) at (1,0) {\text{\textit{\texttt{HCl}}}};
    \node[draw] (c) at (2,0) {\text{\textit{\texttt{C}}}};
    \draw[->] (a) -- (b);
    \draw[->] (b) -- (c);
\end{tikzpicture}} \]

eg. 2:

\[ \text{\begin{tikzpicture}[baseline=(current bounding box.center)]
    \node[draw] (a) at (0,0) {\text{\textit{\texttt{C}}}};
    \node[draw] (b) at (1,0) {\text{\textit{\texttt{O}}}};
    \node[draw] (c) at (2,0) {\text{\textit{\texttt{H}}}};
    \draw[->] (a) -- (b);
    \draw[->] (b) -- (c);
\end{tikzpicture}} \]

eg. 3:

\[ \text{\begin{tikzpicture}[baseline=(current bounding box.center)]
    \node[draw] (a) at (0,0) {\text{\textit{\texttt{C}}}};
    \node[draw] (b) at (1,0) {\text{\textit{\texttt{O}}}};
    \node[draw] (c) at (2,0) {\text{\textit{\texttt{Me}}}};
    \draw[->] (a) -- (b);
    \draw[->] (b) -- (c);
\end{tikzpicture}} \]

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

eg:

\[ \text{\begin{tikzpicture}[baseline=(current bounding box.center)]
    \node[draw] (a) at (0,0) {\text{\textit{\texttt{C}}}};
    \node[draw] (b) at (1,0) {\text{\textit{\texttt{O}}}};
    \node[draw] (c) at (2,0) {\text{\textit{\texttt{Me}}}};
    \draw[->] (a) -- (b);
    \draw[->] (b) -- (c);
\end{tikzpicture}} \]

Contributors

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