A phosphorus ylide that has the following general structural formula is called a Wittig reagent.

\[
\text{Ph}_3\text{P} \rightleftharpoons \text{C} \rightleftharpoons \text{R}^1 \rightleftharpoons \text{R}^2
\]

\(\text{R}^1\) and \(\text{R}^2\) could be hydrogen atoms, alkyl groups, aryl groups, or any combination thereof.

eg:

\[
\begin{array}{c}
\text{Ph}_3\text{P} \rightleftharpoons \text{C} \rightleftharpoons \text{H} \\
\text{Ph}_3\text{P} \rightleftharpoons \text{C} \rightleftharpoons \text{CH}_3 \\
\text{Ph}_3\text{P} \rightleftharpoons \text{C} \rightleftharpoons \text{CH}_3 \\
\end{array}
\]

see also Wittig reaction

Contributors

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