A carboxylic acid ester is an ester derived from a carboxylic acid, which has the following general structural formula.

\[
\begin{array}{c}
\text{O} \\
\text{R}^1 \text{C} - \text{O} - \text{R}^2
\end{array}
\]

R1 = H, alkyl, aryl
R2 = alkyl, aryl

eg:

\[
\begin{array}{c}
\text{CH}_3 \text{C} - \text{O} - \text{C}_6\text{H}5 \\
\text{H} - \text{C} - \text{O} - \text{CH}_3\text{CH}_3
\end{array}
\]

The O=C—O group in a carboxylic acid ester is called the carboxylic acid ester group.

\[
\begin{array}{c}
\text{CH}_3 \text{C} - \text{O} - \text{C}_6\text{H}5
\end{array}
\]

carboxylic acid ester group

Carboxylic acid esters are the most common esters in organic chemistry. The term ester used without a qualifier usually means a carboxylic acid ester and the term ester group a carboxylic acid ester group.

Contributors

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