An imide is a compound that has the following general structural formula.

\[
\begin{array}{c}
\text{O} \\
\text{R}^1 \cdots \text{C} \cdots \text{N} \cdots \text{C} \cdots \text{R}^2 \\
\text{O} \\
\text{R}^3
\end{array}
\]

\(R^1, R^2, \text{ and } R^3\) could be hydrogen atoms, alkyl groups, aryl groups, or any combination thereof.

deg:

\[
\begin{array}{c}
\text{H} \cdots \text{C} \cdots \text{N} \cdots \text{C} \cdots \text{H} \\
\text{H}
\end{array}
\]

\[
\begin{array}{c}
\text{CH}_3 \cdots \text{C} \cdots \text{N} \cdots \text{C} \cdots \text{CH}_3
\end{array}
\]

\[
\begin{array}{c}
\text{CH}_3 \cdots \text{C} \cdots \text{N} \cdots \text{C} \cdots \text{CH}_3
\end{array}
\]

The \(\text{O} = \text{C} \cdots \text{N} \cdots \text{C} \cdots \text{O}\) group in an imide is called the imide group.

\[
\begin{array}{c}
\text{O} \\
\text{CH}_3 \cdots \text{C} \cdots \text{N} \cdots \text{C} \cdots \text{CH}_3
\end{array}
\]

see also cyclic imide

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**Contributors**

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