A hemiacetal is a compound that has the following general structural formula.

\[
\begin{align*}
R^1 \text{C} & \text{OR}^2 \\
\text{H} & \text{OH}
\end{align*}
\]

\[ R^1 = H, \text{ alkyl, aryl} \]
\[ R^2 = \text{alkyl} \]

eg:

The functional group 1 in an organic molecules is called the hemiacetal group; the carbon atom bearing the two oxygen atoms is the hemiacetal carbon.

\[
\begin{align*}
\text{(H)C} & \text{O} \longrightarrow \text{C} \\
\text{H} & \text{OH}
\end{align*}
\]

1

see also cyclic hemiacetal, acetal, hemiketal

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**Contributors**

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