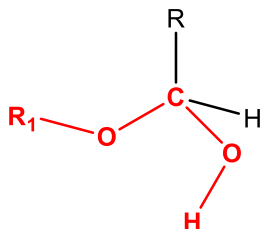


What is the hemiacetal functional group?

A hemiacetal is a functional group in organic chemistry that contains a hydroxyl (-OH) group and an alkoxy (-OR) group attached to the same carbon atom. The term "hemiacetal" is used to describe a compound that is intermediate between an alcohol and an acetal.



Hemiacetals are formed when an aldehyde or a ketone reacts with an alcohol in the presence of a small amount of acid as a catalyst. The acid catalyzes the formation of an intermediate compound known as a "hemiacetal" which can be further reacted to an acetal.

The formation of a hemiacetal can be represented by the following equation:

