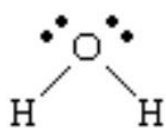
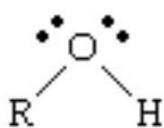


alcohol

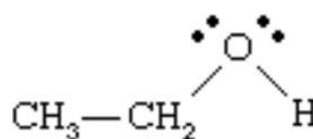
any of a class of [organic compounds](#) characterized by one or more hydroxyl ($-\text{OH}$) groups attached to a [carbon](#) atom of an alkyl group ([hydrocarbon](#) chain). Alcohols may be considered as organic derivatives of [water](#) (H_2O) in which one of the [hydrogen](#) atoms has been replaced by an alkyl group, typically represented by R in organic structures. For example, in ethanol (or [ethyl alcohol](#)) the alkyl group is the ethyl group, $-\text{CH}_2\text{CH}_3$.



water



an alcohol



ethanol

General formula:-



Physical properties:-

In general, the [hydroxyl group](#) makes alcohols [polar](#). Those groups can form [hydrogen bonds](#) to one another and to most other compounds. Owing to the presence of the polar OH alcohols are more water-soluble than simple hydrocarbons. Methanol, ethanol, and propanol are [miscible](#) in water. [Butanol](#), with a four-carbon chain, is moderately soluble. Because of [hydrogen bonding](#), alcohols tend to have higher boiling points than comparable [hydrocarbons](#) and [ethers](#). The boiling point of the alcohol ethanol is $78.29\text{ }^\circ\text{C}$, compared to $69\text{ }^\circ\text{C}$ for the hydrocarbon [hexane](#), and $34.6\text{ }^\circ\text{C}$ for [diethyl ether](#).

Toxicit

With respect to acute toxicity, simple alcohols have low acute toxicities.

Why is the boiling point of water higher than that of alcohol?

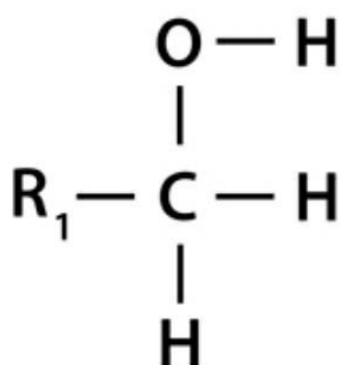
Water has more hydrogen bound than alcohol.

Classification of Alcohol

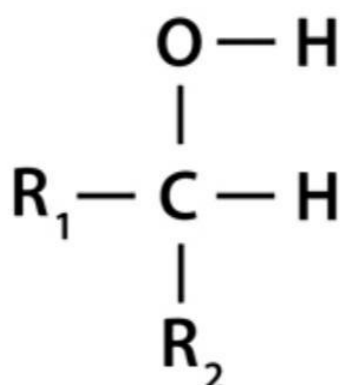
Priamy

Secondary

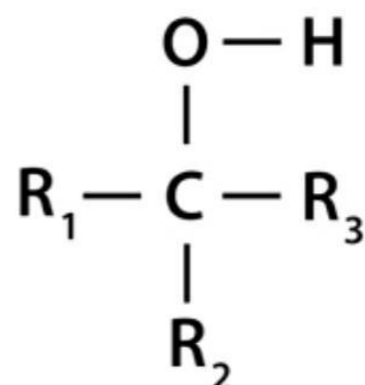
Tertiary



Primary
Alcohol



Secondary
Alcohol



Tertiary
Alcohol