

UNSATURATED ALCOHOLS

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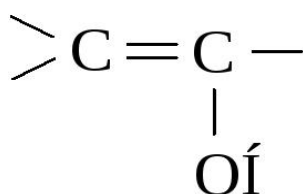
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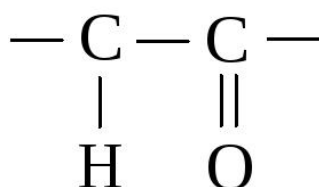
Annotation: This article presents information about unsaturated alcohols.

Keywords: Alcohols, content, carbon.

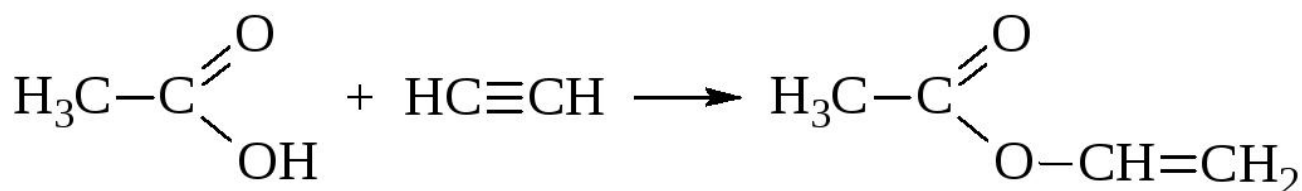
Introduction: Unsaturated alcohols can be ethylene, acetylene and other unsaturated compounds. It should be borne in mind that alkenes cannot carry hydroxyl at carbon in the second valence state (sp^2). Structures:



unstable and isomerized in



Vinyl alcohol, $CH_2=CH-OH$, does not exist in the free state. However, its esters are known, for example, vinyl acetate, obtained from acetic acid and acetylene:



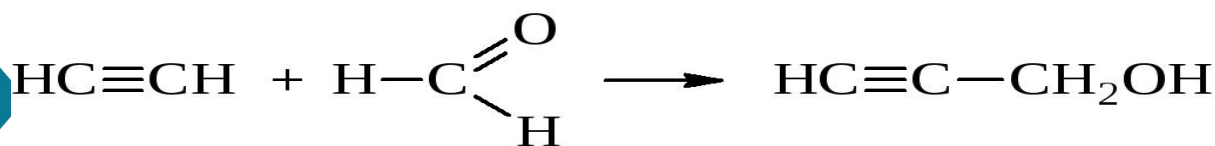
Vinyl acetate is used to produce polyvinyl acetate and polyvinyl alcohol, from which valuable polymers are prepared.

Allyl alcohol has the properties of both alcohols and olefins. It is obtained by hydrolysis of allyl chloride in a 5% alkali solution.



It is used in the production of glycerin.

Propargyl alcohol is obtained by condensation of acetylene with formaldehyde:



It is an intermediate product in the syntheses of allyl alcohol, glycerin, and divinyl.

Alcohols containing several hydroxyl groups are called polyatomic. There are two-, three-, four-atom, etc. alcohols. Diatomic alcohols are called glycols, triatomic alcohols are called glycerols.

Hydroxyl groups in glycols are found in various carbon atoms. Glycols with two hydroxyls at one carbon atom are unstable. They split off water to form aldehydes or ketones.

The isomerism of glycols is determined by the mutual arrangement of hydroxyl groups and the isomerism of the carbon skeleton. Depending on the relative position of the OH-groups, α -, β -, γ -, δ -, ... glycols are distinguished. Depending on the nature of the carbon atoms carrying hydroxyls, glycols can be primary-secondary, primary-tertiary, two-primary, two-factor, etc.

Glycol names can be given in two ways. According to the IUPAC nomenclature, the suffix –diol is added to the name of the main carbon chain and the numbers of the carbon atoms of the longest carbon chain carrying hydroxyl groups are indicated. The names of α -glycols can be derived from the name of the corresponding ethylene carbon with the addition of the word glycol.

References:

1. Thomas A.F. An analysis of the flavor of the dried mushroom, *Boletus edulis*. // J.Agric. Food Chem. 1973. V. 21.
v6. Pp. 955–959.
2. Dijkstra F.Y. Studies on mushroom flavours. Some flavour compounds in fresh, canned and dried edible mushrooms //
Z. Lebensm. Unters. Forsch. 1976. V. 160. Pp. 401–405.
3. Maga J.A. Mushroom flavor // J. Agric. Food Chem. 1981. V. 29. v1. Pp. 1–4.
4. Fischer K.H., Grosch W. Volatile compounds of importance in the aroma of mushrooms (*Psalliota bispora*) // Lebensm. Wiss. Technol. 1987. V. 20. N3. Pp. 233–236.
5. Mau J.L., Chyau C.C., Li J.Y., Tseng, Y.H. Flavor compounds in straw mushrooms *Volvariella volvacea* harvested at
different stages of maturity // J. Agric. Food Chem. 1997. V. 45. N12. Pp. 4726–4729.
6. Wu S., Zorn H., Krings U., Berger R.G. Characteristic volatile from young and aged fruit
bodies of wild *Polyporus*
sulfurous // J. Agric. Food Chem. 2005. V. 53. N11. Pp. 4524–4528.