

Chemistry of α -Terpineol

2-(4-methyl-3-cyclohexen-1-yl)-2-propanol

By

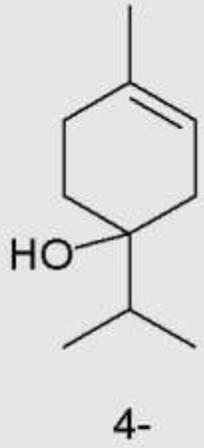
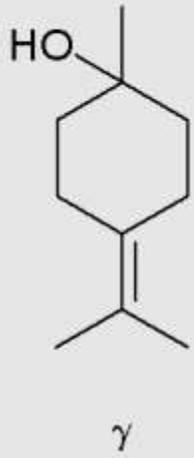
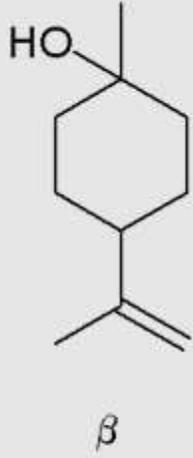
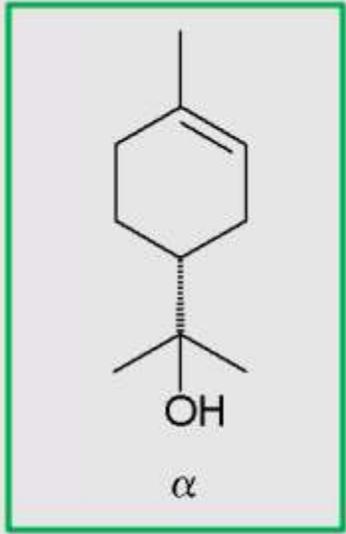
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α -Terpineol

- α -Terpineol is a monoterpene alcohol.
- It has been isolated from a variety of sources such as cajuput oil, pine oil, and petitgrain oil.
- There are four isomers, alpha-, beta-, gamma-terpineol, and terpinen-4-ol. beta- and gamma-terpineol differ only by the location of the double bond.
- Terpineol is usually a mixture of these isomers with alpha-terpineol as the major constituent.



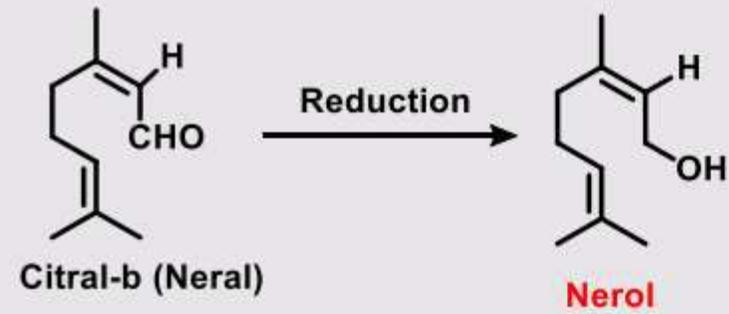
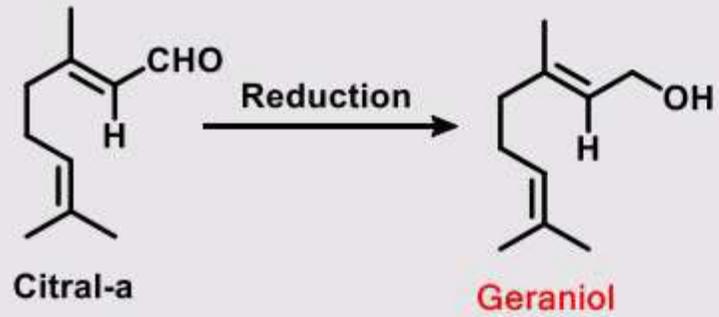
Terpineol has a pleasant odor similar to lilac and is a common ingredient in perfumes, cosmetics, and flavors. α -Terpineol is one of the two most abundant aroma constituents of lapsang souchong tea (Smoked tea); the α -terpineol originates in the pine smoke used to dry the tea. (+)- α -Terpineol is a chemical constituent of skullcap.



Skullcap

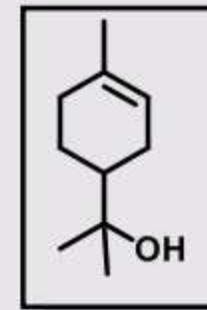
www.herbazest.com

Synthesis of α -Terpineol



Ring closure
dil. H_2SO_4

Slow

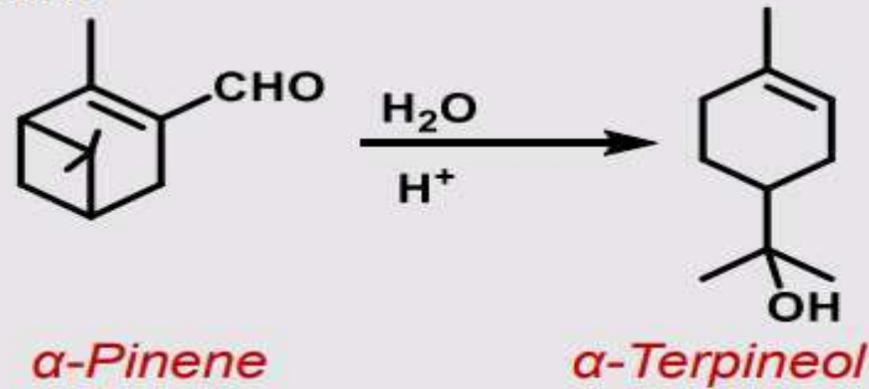


Ring closure
dil. H_2SO_4

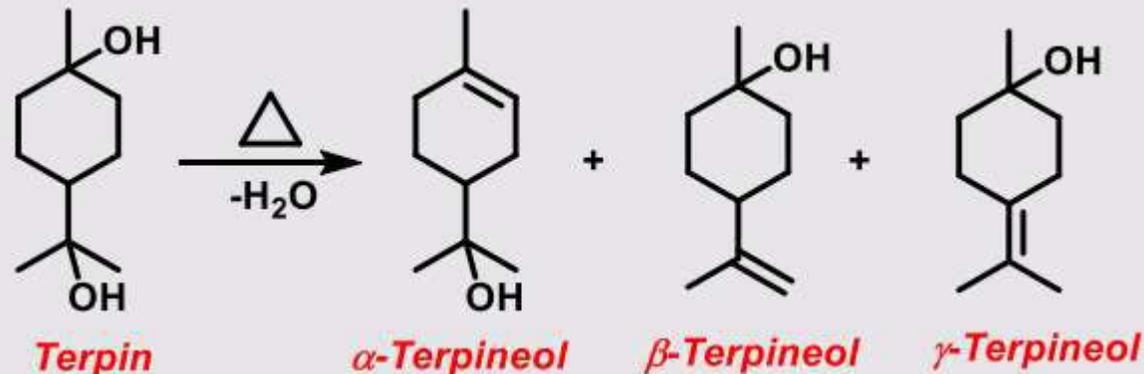
Fast

α -Terpineol

1. Prepared by the hydration of α -Pinene in the presence dilute mineral acids



2. Commercially it is prepared by dehydration of terpin (diol), which gives a mixture of three isomers of terpeneol.



Reactions

