

# INCLUSION COMPLEXES OF $\beta$ -CYCLODEXTRIN WITH ISOMERIC MONOTERPENES

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Cyclodextrins (CDs) are macrocyclic carbohydrate compounds, torus-like shaped consisting of glycopyranose units combined by 1,4-o-glycosidic bonds. They are widely known for their complexing properties towards large number of inorganic and organic compounds. Due to this specific ability they are commonly used by food<sup>1</sup> and cosmetic<sup>2</sup> industry.<sup>2</sup>

Camphene and fenchene are isomeric monoterpenes, constituents of some essential oils, differing only in the position of two methyl substituents.

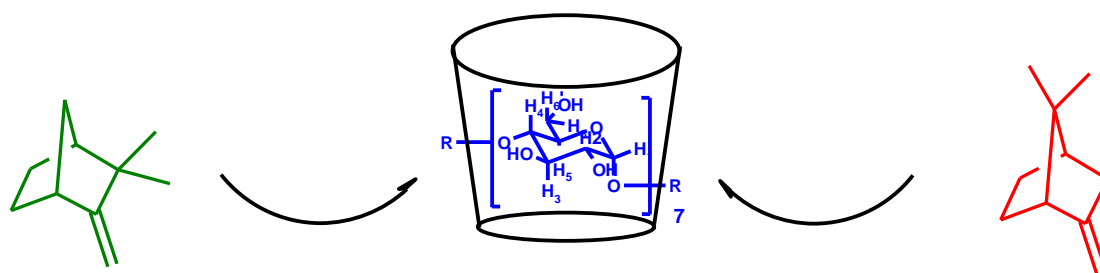


Figure 1. Schematic illustration of forming of the  $\beta$ -cyclodextrin-monoterpene complex.

In the present work results of the studies concerning monoterpene -  $\beta$ -cyclodextrin interactions obtained by three techniques (gas-liquid chromatography, <sup>1</sup>HNMR and X-Ray crystallography) are presented.

1. Szente, L., Szejtli, J. *Trends Food Sci Tech* **15**, 137 (2004).
2. Buschmann, H-J., Schollmeyer, E. *J. Cosmet. Sci.* **53**, 181 (2002).