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Oxidation of 3- and 4-carenes with mercuric acetate in acetic acid

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Abstract

1. A study was made of the oxidation of 3-carene with $\text{Hg}(\text{OAc})_2$ in acetic acid at 23 and 86°, and with $(\text{HgOAc})_2$ at 90°. The action of both of the oxidizing agents leads to the same acetylation products: the acetates of p-mentha-1,5-dien-8-ol and p-mentha-1(7)-5-dien-8-ol. 2. The products of the oxidation of 4-carene with $\text{Hg}(\text{OAc})_2$ in acetic acid at 20° contain the acetates of p-mentha-1,5-dien-8-ol and p-mentha-1(7),5-dien-8-ol. 3. The formation of organomercury compounds of composition $\text{C}_{18}\text{H}_{26}\text{O}_8\text{Hg}_3$ occurs when the 3- and 4-carenes are oxidized with $\text{Hg}(\text{OAc})_2$ at room temperature. © 1972 Consultants Bureau.

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