

# Efficient Synthesis of (1*R*,4*S*,6*R*)-4-Isopropenyl-1,3,3-trimethyl-7- oxabicyclo[4.1.0]heptan-2-one

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**Abstract**—A simple and convenient one-pot synthesis of (1*R*,4*S*,6*R*)-4-isopropenyl-1,3,3-trimethyl-7-oxabicyclo[4.1.0]heptan-2-one was developed consisting in a thermodynamic methylation of carvone (NaH, MeI, THF, 20°C) followed by the epoxidation with alkalized hydrogen peroxide. The reduction of the obtained epoxyketone with sodium borohydride proceeded stereoselectively to give a β-alcohol. The attempts to convert its isopropenyl fragment into an acetate group by a rearrangement of products or intermediates of the oxidative fragmentation resulted only in obtaining intermediate acyl derivatives.

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