Acetoxylation of camphene catalysed by beta zeolite

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ABSTRACT

Beta zeolite with Si/Al ratio equal to 40 was synthesised and used as solid catalyst in acetoxylation of camphene. The main product of camphene acetoxylation was isobornyl acetate being also formed bornyl acetate and fenchyl acetate. Effects of various parameters, such as reactant molar ratio, reaction temperature, catalyst loading and reusability of the catalyst were studied to optimise the reaction conditions. The catalytic stability of beta zeolite in the acetoxylation of camphene was studied by performing consecutive batch runs with the same catalyst sample. After the third run, it was observed similar values of the catalytic activity.

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