Annotation

ČERMÁK, Jan. *Microporous materials in organic chemistry (The influence of microporous catalyzers on the synthesis of N-alkylbenzamides).* Hradec Králové: Pedagogical Faculty, University of Hradec Králové, 2009, 58 pp. Diploma thesis.

The following diploma thesis deals the theme of synthesis of N-alkylbenzamides from benzoic acid and primary aliphatic amines. Amines react with benzoic acid, it leads to formation of quaternary ammonium salt, which dehydrates by heating up with formation of amide. Synthesis was made under the solvent free conditions in the microwave field.

Above all there was tested the influence of microporous catalysts on the reaction of benzoic acid with hexylamine. Use of acid catalysts SiO_2/H_3PO_4 and montmorillonite KSF had the positive influence on the studied reaction.