

Research Title Preparation of n - Alkyl Acrylates and Their Polymerization

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Abstract

In the preparation of n-alkyl acrylates by alcoholysis of methyl acrylate with n - alkyl alcohols, containing 4 to 12 carbon atoms, and by acid chloride method using acryloyl chloride and the corresponding alcohols, using hydroquinone as inhibitor for polymerization, it was found that the yield of n-alkyl acrylates were in range of 51 - 86 % for alcoholysis method and 43 - 50 % for acid chloride method.

Graft copolymerization of n-butyl acrylate onto starch was initiated by ceric ammonium nitrate and was found to have the efficiency of 44 %. However graft copolymerization of dodecyl acrylate onto starch was found to be unsuccessful.