

(٢١) Catalytic activity of K10-montmorillonite in reaction of arenes with some mono- and di-functional alkylating agents, mostly derived from isobutane and isobutene. Albar, H. A.; Basaif, S. A.; Khalaf, Ali A. Chem. Dep., Fac. Sci., King Abdulaziz Univ., Jeddah, Saudi Arabia. Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1996), 35B(2), 161-6. CODEN: IJSBDB ISSN: 0376-4699. Journal written in English. CAN 124:260454 AN 1996:63718 CAPLUS (Copyright 2004 ACS on SciFinder (R))

Abstract

K10-montmorillonite was tested as Friedel-Crafts catalyst in the alkylation of benzene, toluene and anisole with one or more of the alkylating agents. The reaction products consisted essentially of 1,1-diaryl-2-methylpropane and 1,2-diaryl-2-methylpropane derivs. together with side products resulting from transalkylation, monoalkylation, hydride transfer and elimination. K10-montmorillonite was also used to catalyze the alkylation of naphthalene with benzyl alc. whereby a mixt. of α - and β -benzyl naphthalene were obtained. The results, explained in terms of carbocation transformations, show K10-montmorillonite to be a mild catalyst with no subsequent side-chain isomerizing ability just like FeCl₃, AlCl₃-CH₃NO₂, TiCl₄ and ZrCl₄.