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Interaction of adsorbed *n*- and *iso*-propyl alcohols with the Zr/Si oxide catalyst based on the data of molecular composition of gasphase and elemental, phase, thermal analysis of solid products

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Abstract

It was shown that the process of thermal desorption of alcohols adsorbed at room temperature on Zr/Si oxide samples begins with the desorption of the alcohol in the molecular form at low (<120 ^{o}C), with the dehydration to olefins under moderate (<250 ^{o}C), the formation of hydrocarbons of different saturation and composition, seals products and the products of combustion with lattice oxygen of catalyst at elevated (> 350 ^{o}C) temperatures. The influence of the formation of seal products on the elemental composition of the surface of the Zr/Si oxide catalyst was established.