

Catalytic Synthesis of Certain Perfluorinated Ketones and Study of Their Structure by ^{19}F NMR Spectroscopy

I. M. Fenicheva^a, V. V. Berenblit^b, T. A. Bispens^a, N. V. Lebedev^b, and D. D. Moldavskii^a

^aRussian Scientific Centre “Applied Chemistry,” St. Petersburg, Russia

^bFSUE “NIISK,” St. Petersburg, Russia

e-mail: htf1352501@rambler.ru

Received June 17, 2013

Abstract—An efficient catalyst of a perfluorinated ketone synthesis of a high selectivity in the absence of solvent was proposed. Products of reaction of perfluorinated fluorides of various structures with tetrafluoroethylene and hexafluoropropylene in the presence of efficient catalysts without solvent were examined. The structure of the resulting products and their isomeric composition were identified by ^{19}F NMR spectroscopy.

DOI: 10.1134/S1070427213080156