INVESTIGATION OF THE HF-CATALYZED CONDENSATION REACTION TO DIARYLHEXAFLUOROPROPANES

W.K. Appel, G. Siegemund and M. Stöbbe Hoechst Aktiengesellschaft, Hauptlaboratorium G 830, Postfach 80 03 20, 6230 Frankfurt/M. 80, F.R.G.

HF-catalyzed condensation of 2-hydroxy-2-arylhexafluoropropanes, e.g. I, with suitably substituted arenes, e.g. II, leads to hexafluoroisopropylidene-bridged intermediates, e.g. III, for 6F-monomers.

The condensation reaction was carried out with several substrates, side products were characterized and their formation under different reaction conditions was studied.

6F-Monomers are building blocks for a variety of polycondensates with high thermo-oxidative stability and low dielectric constant.