Abstract

Chromatographic and thermodynamic parameters (specific retention volume, distribution coefficient, standard molar enthalpy, entropy and Gibbs energy) has been determined for retention of isobutyl esters of homological set of perfluorinated carboxylic acids C6 – C12 on the fluorinated stationary phase Rtx-200MS. Determined data has shown, that distribution of solutes between stationary and mobile phase is driven neither by the enthalpy nor entropy, but both these contributors play the same role in the retention mechanism. Helium and hydrogen has been used as a mobile phases during analysis. Their influence on thermodynamic behavior of isobutyl esters of PFCAs is insignificant.