Electronic supplementary information

POLYMERIC STATIONARY PHASES WITH VARIABLE POLARITY FOR GC SEPARATION OF AROMATIC COMPOUNDS AND THEIR SULFUR ANALOGS

A. Yu. Kanateva,* A. A. Kurganov, A. A. Korolev, and E. N. Viktorova

Topchiev Institute of Petrochemical Synthesis, Russian Academy of Sciences, Leninskii pr. 29, Moscow, 119991 Russia

Table S1. Model sorbates of the Rohrschneider model

Model compound	Sorbent selectivity constants	Modelled groups of the compounds	Polymer-sorbate interaction
Benzene	$X = \frac{I_{benzene}^{polymer} - I_{benzene}^{squalane}}{100}$ $I_{benzene}^{squalane} = 649$	aromatic and non-saturated hydrocarbons	π-complexation
Ethanol	$Y = \frac{I_{ethanol}^{polymer} - I_{ethanol}^{squalane}}{100}$ $I_{ethanol}^{squalane} = 384$	alcohols, primary and secondary amines, fatty acids, ex. lower acids	hydrogen bonding with the electron-donor groups of the polymer
Butanone	$Z = \frac{I_{butanone}^{polymer} - I_{butanone}^{squalane}}{100}$ $I_{butanone}^{squalane} = 531$	ketones, aldehydes, esters and ethers, FAME	donor-acceptor complexation
Nitrobenzene	$U = \frac{I_{nitrobenzene}^{polymer} - I_{nitrobenzene}^{squalane}}{100}$ $I_{nitrobenzene}^{squalane} = 1062$	nitro, nitrile compounds, halogen derivatives of aromatic hydrocarbons	orientational and donor-acceptor complexation
Pyridine	$S = \frac{I_{pyridine}^{polymer} - I_{pyridine}^{squalane}}{100}$ $I_{pyridine}^{squalane} = 695$	aromatic amines, pyridines, heterocyclic basic compounds	hydrogen bonding with the electron-donor groups of the polymer, donor-acceptor complexation