Electronic Supplementary Information

Separation performance of dithienyl benzothiadiazole-based stationary phases for capillary gas chromatography

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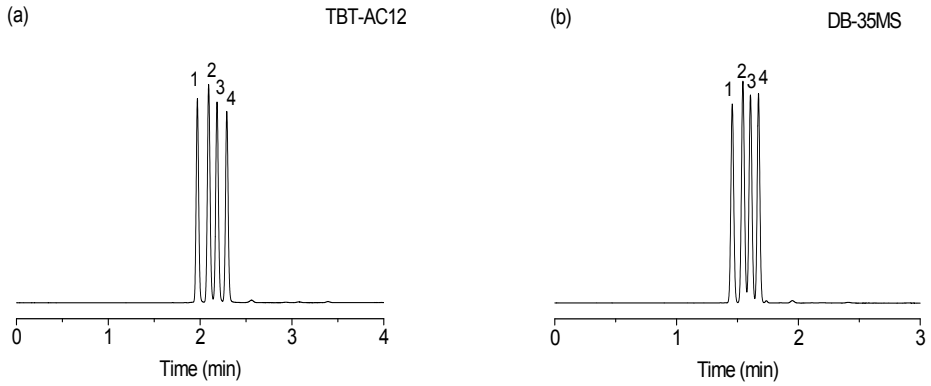

Fig. S1. Separation chromatograms for the hexane isomers on the TBT-AC12 and DB-35MS capillary columns. Peaks: (1) 2,2-dimethylbutane, (2) 2,3-dimethylbutane, (3) 3-methylpentane, (4) *n*-hexane. GC conditions: from 30 ℃ held for 3 min to 120 ℃ at 15 ℃ min^{-1} at a flow rate of 0.4 mL min^{-1}.

Table S1
Column repeatability and reproducibility on the retention times (t_R, min) of the isomers on the TBT-AA column (n = 4).

Analyte	Run-to-run		Day-to-day		Column-to-column	
	t_R	RSD (%)	t_R	RSD (%)	t_R	RSD (%)
m-Dibromobenzene	3.612	0.12	3.672	1.7	3.907	4.7
p-Dibromobenzene	3.799	0.10	3.861	1.8	4.112	4.7
o-Dibromobenzene	4.164	0.10	4.235	1.7	4.525	4.7
m-Chloronitrobenzene	5.114	0.03	5.182	1.3	5.627	4.9
o-Chloronitrobenzene	5.443	0.02	5.512	1.3	6.022	5.0
p-Chloronitrobenzene	5.797	0.02	5.875	1.3	6.373	4.9

Table S2

Column repeatability and reproducibility on the retention times (t_R, min) of the isomers on the TBT-AC12 column (n = 4).

Analyte	Run-to-run		Day-to-day		Column-to-column	
	t_R	RSD (%)	t_R	RSD (%)	t_R	RSD (%)
2,2-Dimethylbutane	2.024	0.07	2.026	1.3	1.970	1.8
2,3-Dimethylbutane	2.156	0.09	2.158	1.3	2.093	1.8
3-Methylpentane	2.253	0.07	2.256	1.3	2.184	1.7
Hexane	2.366	0.06	2.370	1.3	2.291	1.8
m-Cymene	6.292	0.03	6.330	1.1	6.092	1.9
p-Cymene	6.650	0.03	6.689	1.1	6.442	1.8
o-Cymene	7.247	0.03	7.290	1.1	7.021	1.9