

<< Develosil Column >>

TEST REPORT

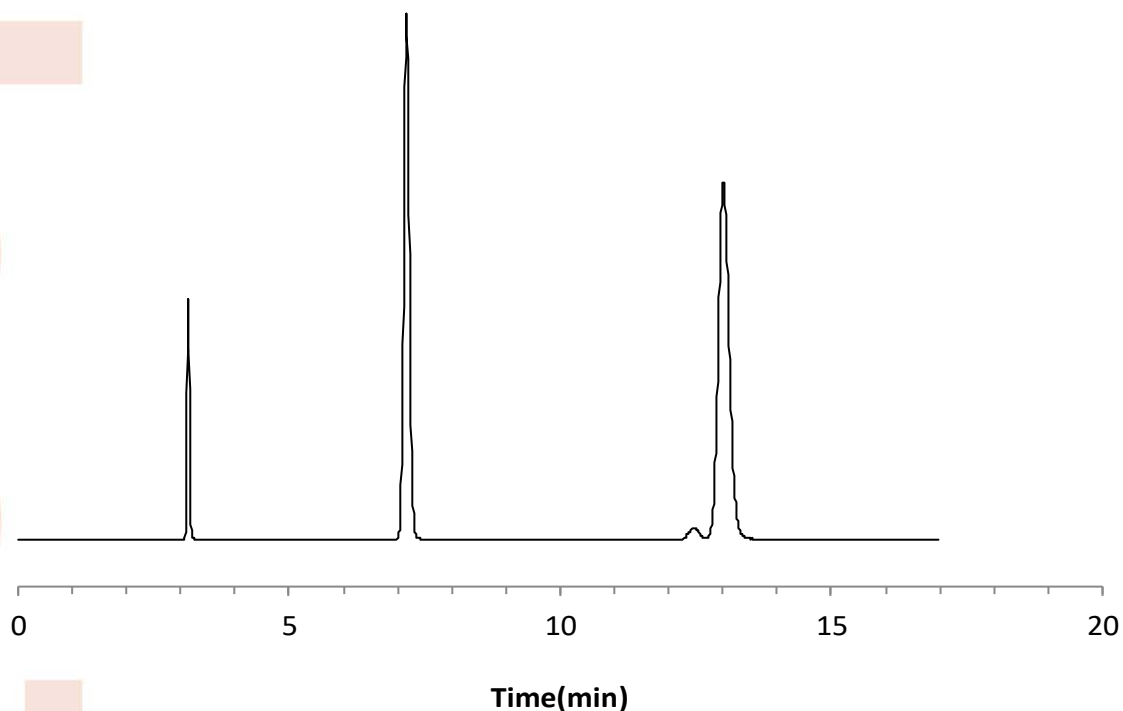
Packings	Develosil	RPAQUEOUS, 3 μm	Batch No.	120315
Column size	Inner diameter	4.6 mm	Length	150 mm
End fitting type	NW			
Mfg. No.	31051866-IL			

Operating conditions

Mobile phase	:	Acetonitrile:water=70:30
Flow rate	:	1.0 mL/min
Column temp.	:	30 °C
Pressure	:	8.2 MPa
Detection	:	UV 254 nm

Sample (Order of elution)

- 1 Benzene
- 2 Fluorene
- 3 Pyrene



Theoretical plate	(2nd peak)	$5.54 \times (t_R/W_{0.5})^2 = 22127$
Asymmetry factor	(10% Height of 2nd peak)	= 1.04

Mobile phase at shipment: Acetonitrile:water=70:30

Certificate of Analysis

Develosil RPAQUEOUS-3

Batch # 120315

Analytical Results for Develosil RPAQUEOUS-3

Analysis of Unbonded Silica Gel	Result
Median Particle Size [μm]	3.20
Surface Area [m^2/g]	307
Pore Volume [ml/g]	1.10
Median Pore Diameter [nm]	13.0

※Median Particle Size was measured using Coulter Multisizer III, and Surface Area, Pore Volume and Median Pore Diameter were measured using Coulter SA3100.

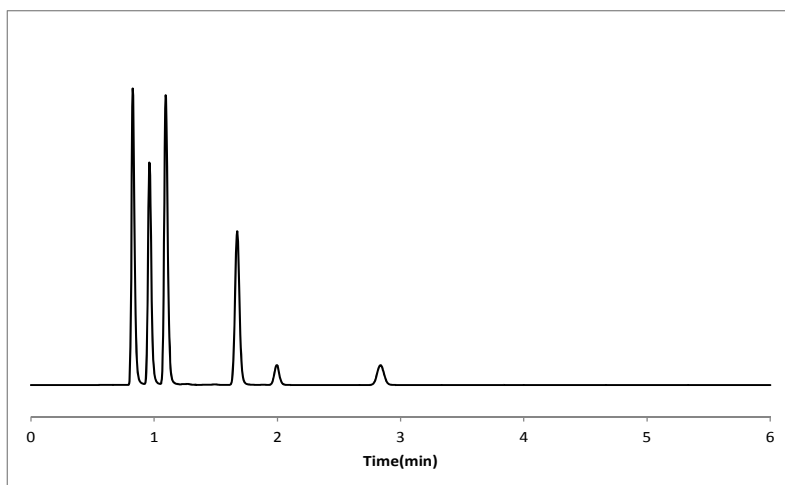
Analysis of Develosil RPAQUEOUS-3

Total carbon [%]	18.3
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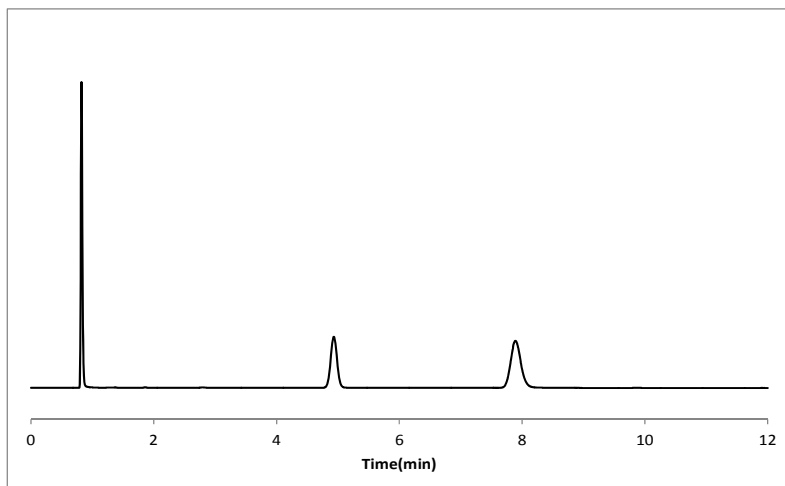
Chromatographic Results for Develosil RPAQUEOUS-3

Separation Factor

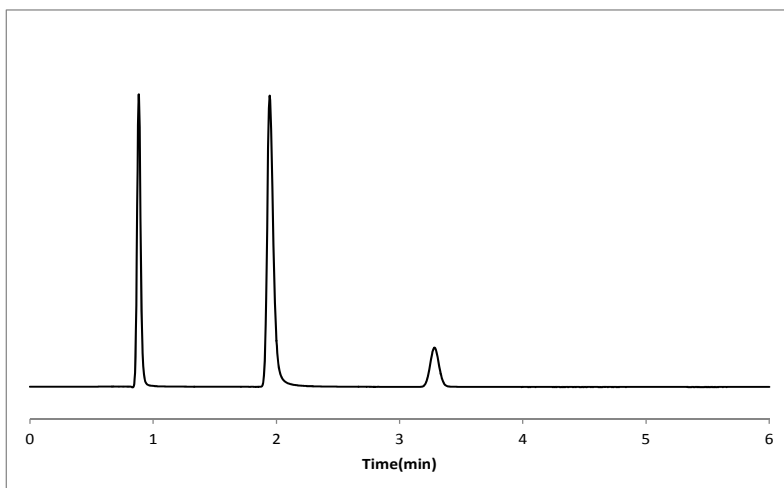
α (Caffeine/Phenol)	0.50
α (Toluene/Benzene)	1.73
α (Methyl benzoate/Toluene)	0.42
α (Triphenylene/o-Terphenyl)	1.72
α (Pyridine/Phenol)	0.45
α (Oxine-Copper/Caffeine)	0.12
α (Formic acid/Acetic acid)	0.23



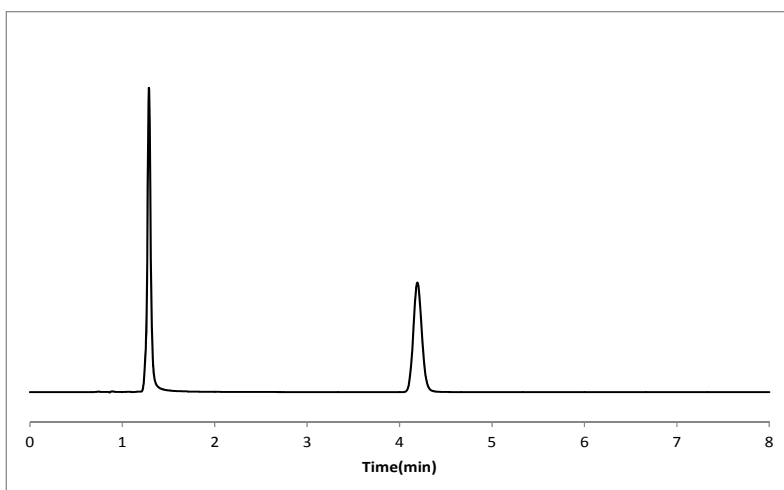
Column size :75x4.6mm I.D.
 Mobile Phase :CH₃OH/Water(70/30)
 Flow rate :1.0ml/min
 Detection :UV 254nm
 Temperature :40°C
 Sample
 1:Uracil
 2:Caffeine
 3:Phenol
 4:Methyl benzoate
 5:Benzene
 6:Toluene



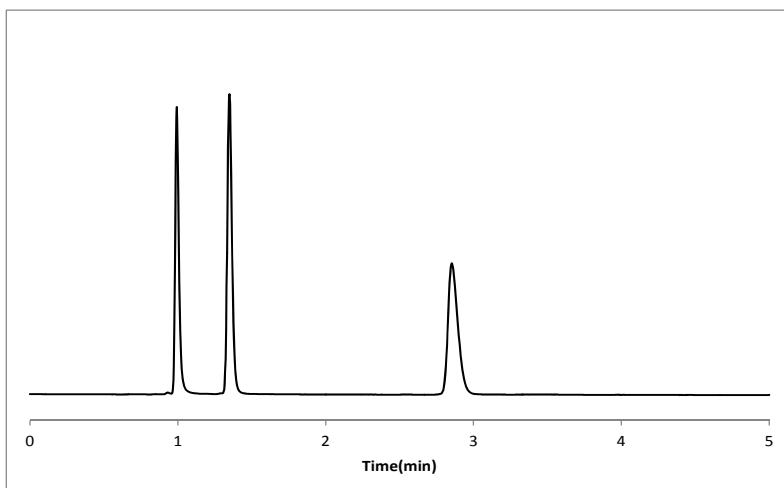
Column size :75x4.6mm I.D.
 Mobile Phase :CH₃OH/Water(80/20)
 Flow rate :1.0ml/min
 Detection :UV 254nm
 Temperature :40°C
 Sample
 1:Uracil
 2:o-Terphenylen
 3:Triphenylene



Column size :75x4.6mm I.D.
 Mobile Phase :CH₃OH/Water(30/70)
 Flow rate :1.0ml/min
 Detection :UV 254nm
 Temperature :40°C
 Sample 1:Uracil
 2:Pyridine
 3:Phenol



Column size :75x4.6mm I.D.
 Mobile Phase :CH₃CN/0.2%H₃PO₄(10/90)
 Flow rate :1.0ml/min
 Detection :UV 254nm
 Temperature :40°C
 Sample 1:Oxine-Copper
 2:Caffeine



Column size :75x4.6mm I.D.
 Mobile Phase :CH₃CN/0.2%H₃PO₄(2/98)
 Flow rate :1.0ml/min
 Detection :UV 210nm
 Temperature :40°C
 Sample 1:Formic acid
 2:Acetic acid
 3:Propionic acid