

<< Develosil Column >>

TEST REPORT

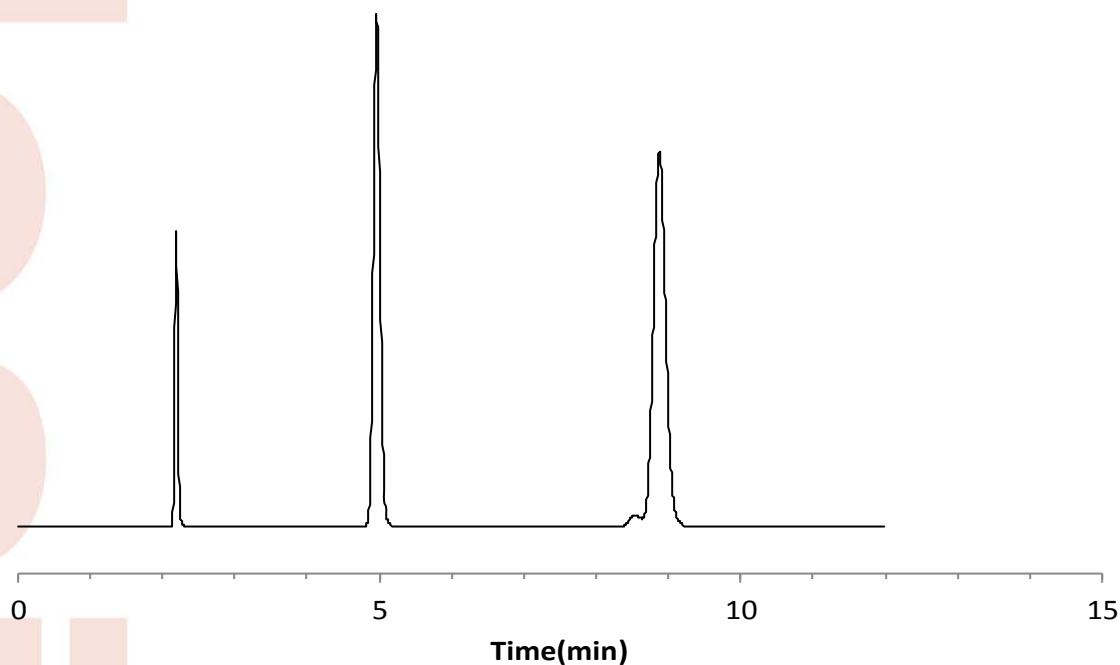
Packings	Develosil	RPAQUEOUS-AR, 3 μm	Batch No.	04042
Column size	Inner diameter	4.6 mm	Length	100 mm
End fitting type	NW			
Mfg. No.	20021966-JH			

Operating conditions

Mobile phase	:	Acetonitrile:water=70:30
Flow rate	:	1.0 mL/min
Column temp.	:	30 °C
Pressure	:	5.8 MPa
Detection	:	UV 254 nm

Sample (Order of elution)

- 1 Benzene
- 2 Fluorene
- 3 Pyrene



Theoretical plate	(2nd peak)	$5.54 \times (t_R/W_{0.5})^2 = 13303$
Asymmetry factor	(10% Height of 2nd peak)	= 1.07

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

Nomura Chemical Co., Ltd.

Certificate of Analysis

Develosil RPAQUEOUS-AR-3

Batch # 04042

Analytical Results for Develosil RPAQUEOUS-AR-3

Analysis of Unbonded Silica Gel

	Result
Median Particle Size [μm]	3.25
Surface Area [m^2/g]	304
Pore Volume [ml/g]	1.10
Median Pore Diameter [nm]	13.86

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

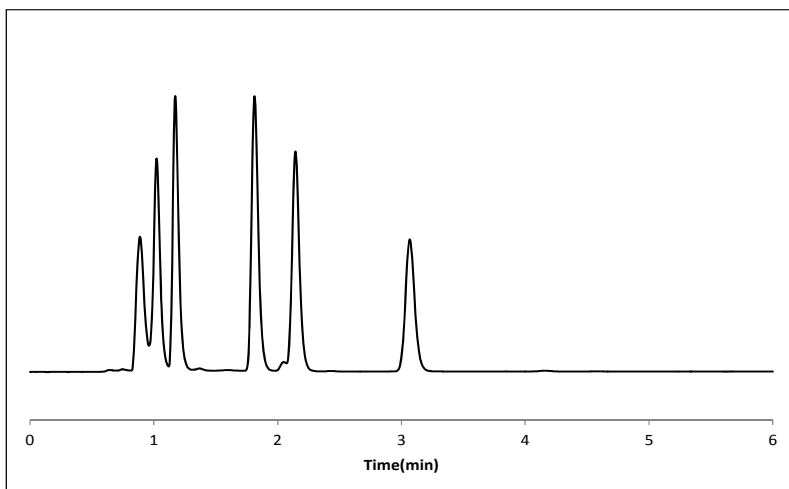
Analysis of Develosil RPAQUEOUS-AR-3

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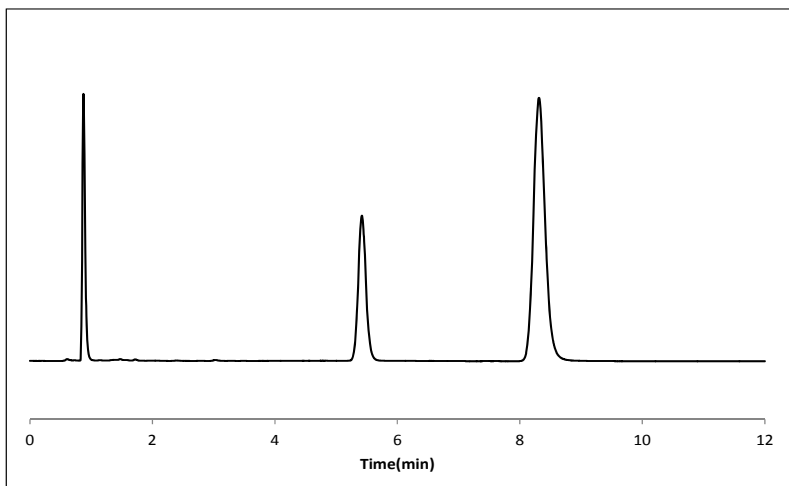
Chromatographic Results for Develosil RPAQUEOUS-AR-3

Separation Factor

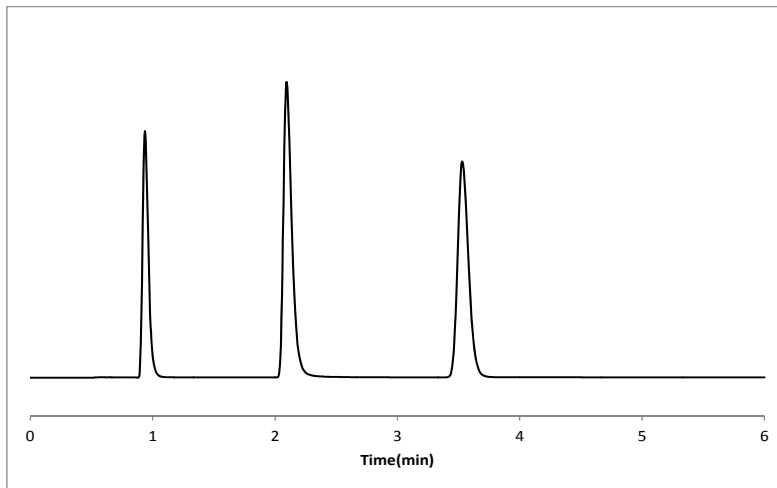
α (Caffeine/Phenol)	0.46
α (Toluene/Benzene)	1.74
α (Methyl benzoate/Toluene)	0.42
α (Triphenylene/o-Terphenyl)	1.64
α (Pyridine/Phenol)	0.44
α (Oxine-Copper/Caffeine)	0.11
α (Formic acid/Acetic acid)	0.20



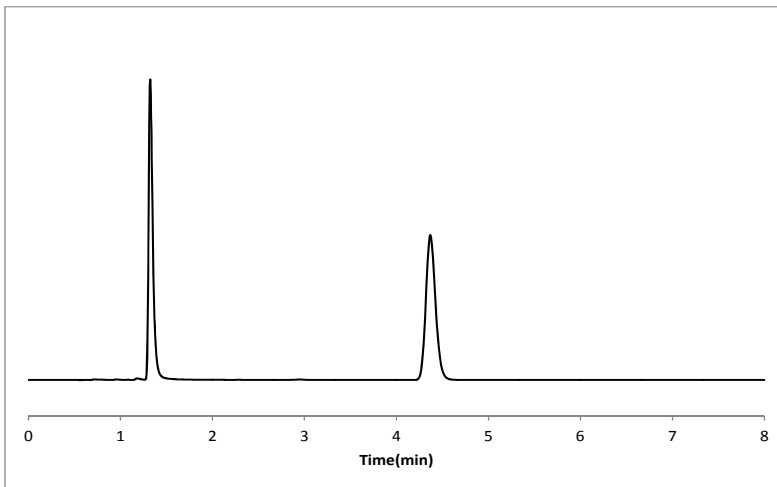
Column size :75x4.6mm I.D.
 Mobile Phase :CH₃OH/Water(70/30)
 Flow rate :1.0ml/min
 Detection :UV 254nm
 Temperature :40°C
 Sample 1:Uracil
 2:Caffeine
 3:Phenol
 4:Methyl benzoate
 5:Benzene
 6:Toluene



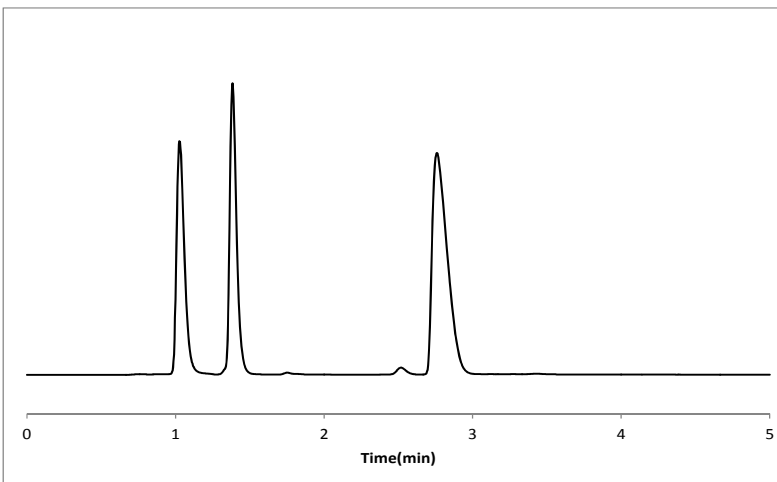
Column size :75x4.6mm I.D.
 Mobile Phase :CH₃OH/Water(80/20)
 Flow rate :1.0ml/min
 Detection :UV 254nm
 Temperature :40°C
 Sample 1:Uracil
 2:o-Terphenylen
 3:Triphenylene



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