

<< Develosil Column >>

TEST REPORT

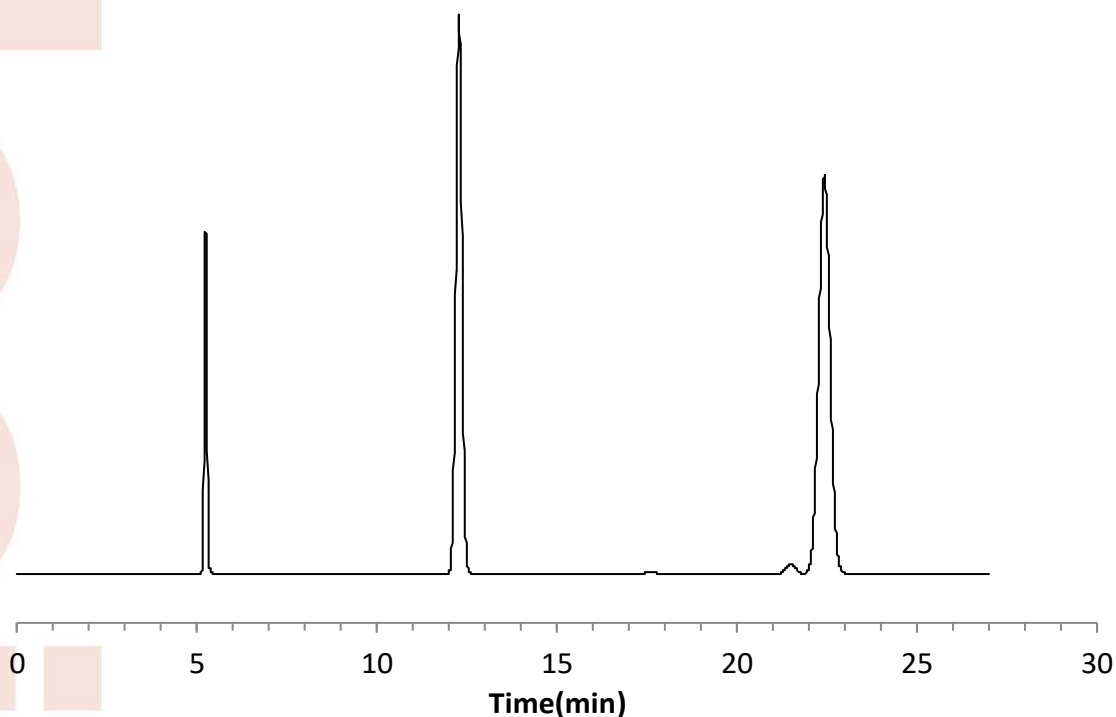
Packings	Develosil	C30-UG, 5 μm	Batch No.	020317
Column size	Inner diameter	4.6 mm	Length	250 mm
End fitting type	NW			
Mfg. No.	04071864-ZF			

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)	$5.54 \times (t_R/W_{0.5})^2 = 23828$
Asymmetry factor	(10% Height of 2nd peak)	= 1.00

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

Certificate of Analysis

Develosil C30-UG-5

Batch # 020317

Analytical Results for Develosil C30-UG-5

Analysis of Unbonded Silica Gel	Result
Median Particle Size [μm]	5.32
Surface Area [m^2/g]	296
Pore Volume [ml/g]	1.11
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.

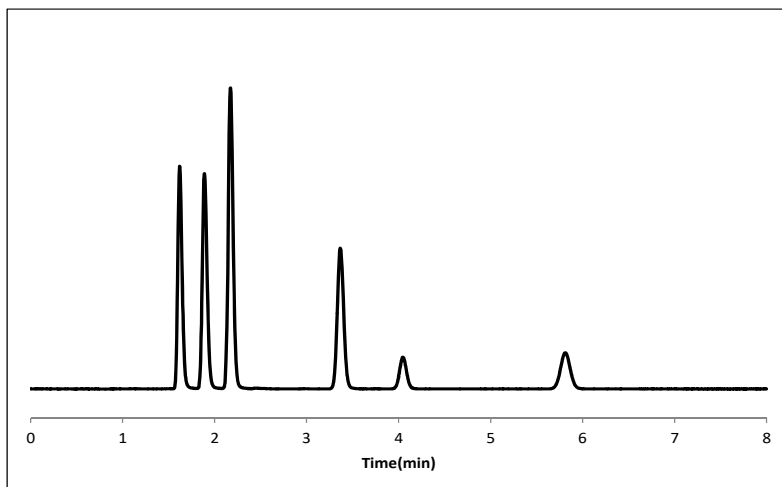
Analysis of Develosil C30-UG-5

Total carbon [%]	17.9
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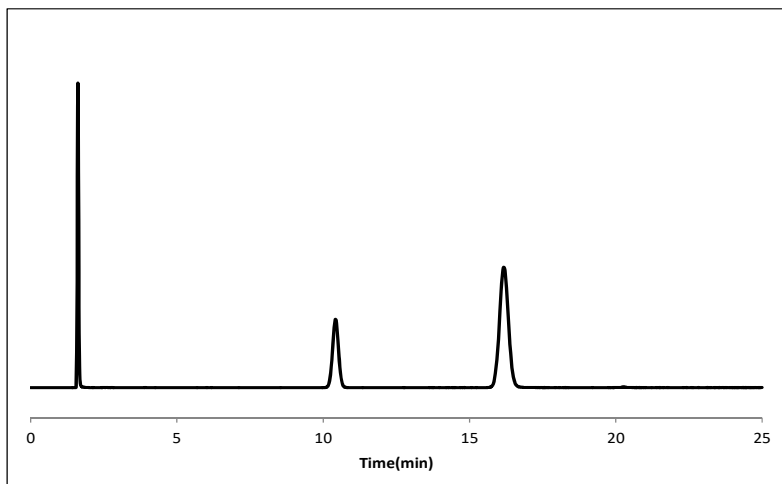
Chromatographic Results for Develosil C30-UG-5

Separation Factor

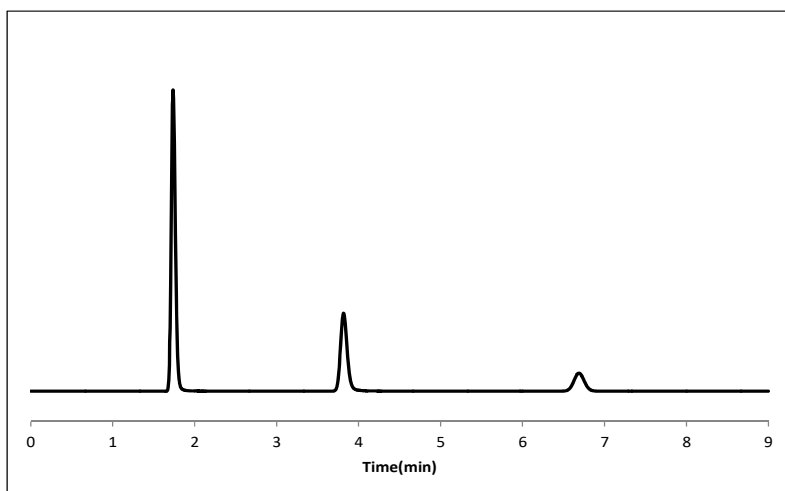
α (Caffeine/Phenol)	0.49
α (Toluene/Benzene)	1.73
α (Methyl benzoate/Toluene)	0.42
α (Triphenylene/o-Terphenyl)	1.65
α (Pyridine/Phenol)	0.42
α (Oxine-Copper/Caffeine)	0.14



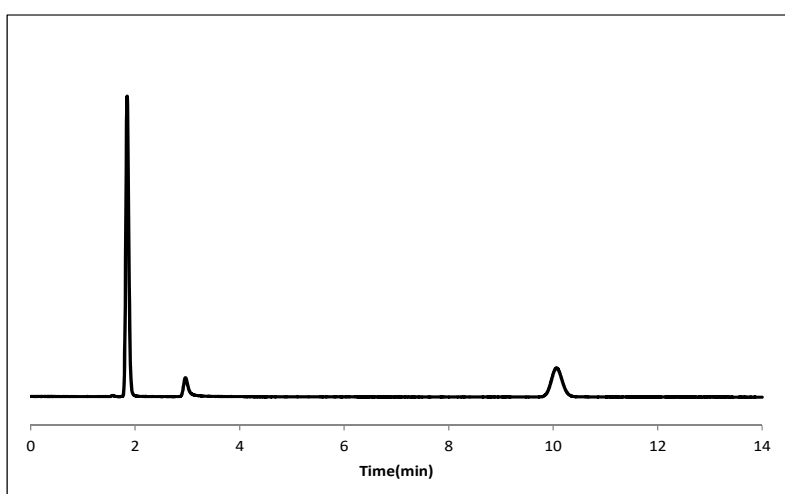
Column size :150x4.6mm I.D.
 Mobile Phase :CH₃OH/Water(70/30)
 Flow rate :1.0ml/min
 Detection :UV 254nm
 Temperature :40°C
 Sample 1:Uracil
 2:Caffeine
 3:Phenol
 4:Methyl benzoate
 5:Benzene
 6:Toluene



Column size :150x4.6mm I.D.
 Mobile Phase :CH₃OH/Water(80/20)
 Flow rate :1.0ml/min
 Detection :UV 254nm
 Temperature :40°C
 Sample 1:Uracil
 2:o-Terphenyl
 3:Triphenylene



Column size :150x4.6mm I.D.
Mobile Phase :CH₃OH/Buffer(30/70)
Flow rate :1.0ml/min
Detection :UV 254nm
Temperature :40°C
Sample 1:Uracil
2:Pyridine
3:Phenol
Buffer: 25mM Ammonium Phosphate (pH7.0)



Column size :150x4.6mm I.D.
Mobile Phase :CH₃OH/Buffer(20/80)
Flow rate :1.0ml/min
Detection :UV 254nm
Temperature :40°C
Sample 1:Uracil
2:Oxine-Copper
3:Caffeine
Buffer: 25mM Ammonium Phosphate (pH2.0)