

<< Develosil Column >>

TEST REPORT

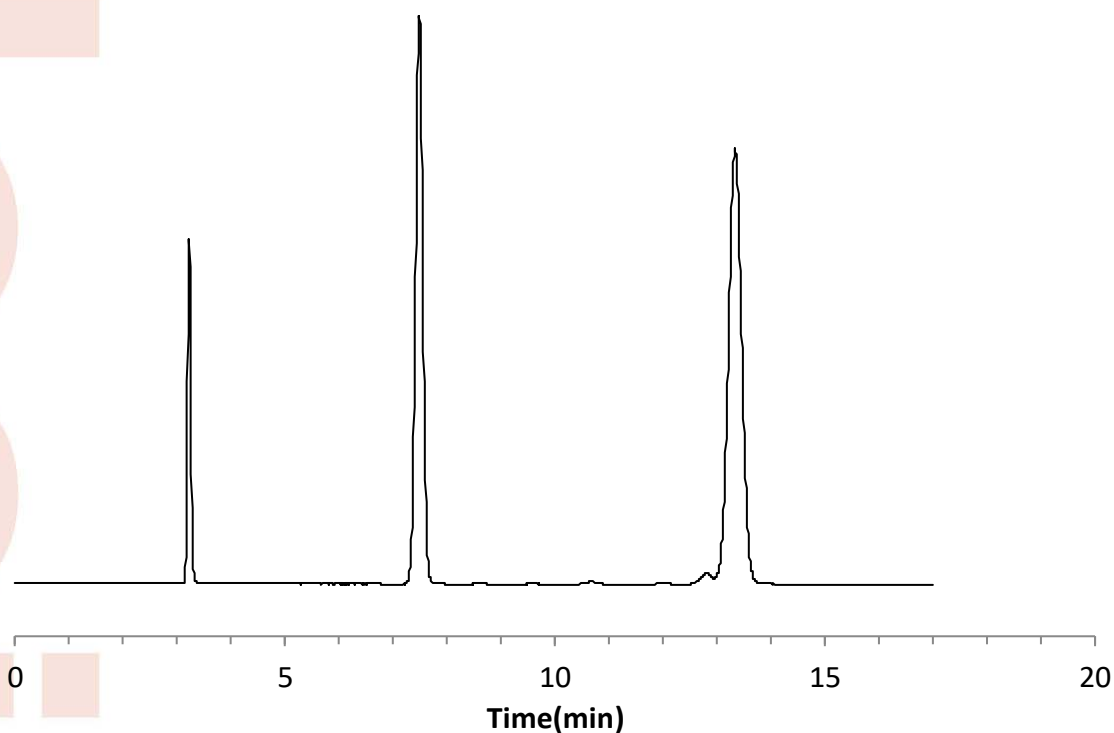
Packings	Develosil	C30-UG, 5 μ m	Batch No.	04081
Column size	Inner diameter	4.6 mm	Length	150 mm
End fitting type	NW			
Mfg. No.	15041963-PI			

Operating conditions

Mobile phase	:	Acetonitrile:water=70:30
Flow rate	:	1.0 mL/min
Column temp.	:	30 $^{\circ}$ C
Pressure	:	3.7 MPa
Detection	:	UV 254 nm

Sample (Order of elution)

- 1 Benzene
- 2 Fluorene
- 3 Pyrene



Theoretical plate	(2nd peak)	$5.54 \times (t_R/W_{0.5})^2 = 14311$
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 # 04081

Analytical Results for Develosil C30-UG-5

Analysis of Unbonded Silica Gel

	Result
Median Particle Size [μm]	5.27
Surface Area [m^2/g]	310
Pore Volume [ml/g]	1.12
Median Pore Diameter[nm]	13.92

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

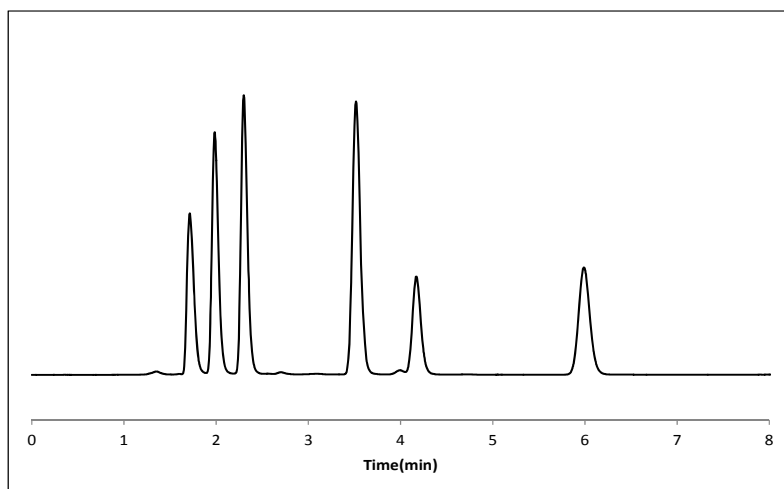
Analysis of Develosil C30-UG-5

Total carbon [%]	18.47
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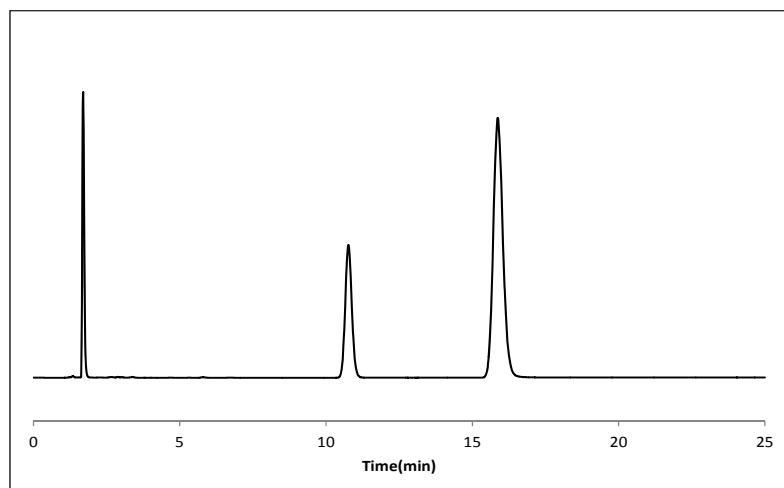
Chromatographic Results for Develosil C30-UG-5

Separation Factor

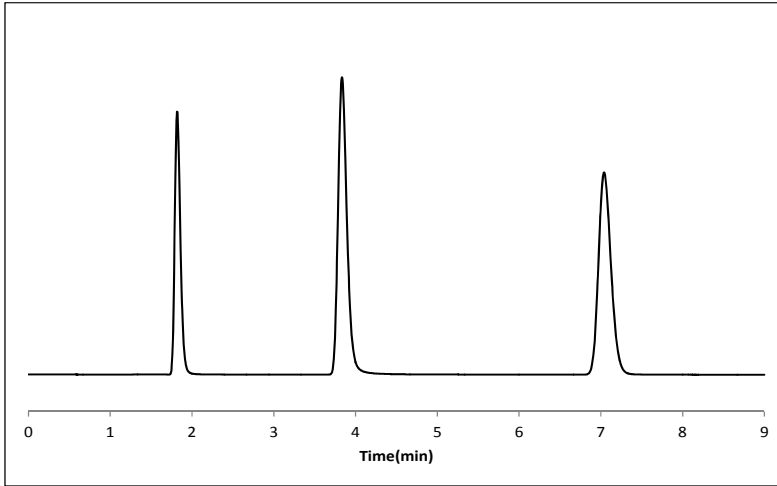
α (Caffeine/Phenol)	0.48
α (Toluene/Benzene)	1.74
α (Methyl benzoate/Toluene)	0.43
α (Triphenylene/o-Terphenyl)	1.60
α (Pyridine/Phenol)	0.39
α (Oxine-Copper/Caffeine)	0.11
α (Formic acid/Acetic acid)	0.21



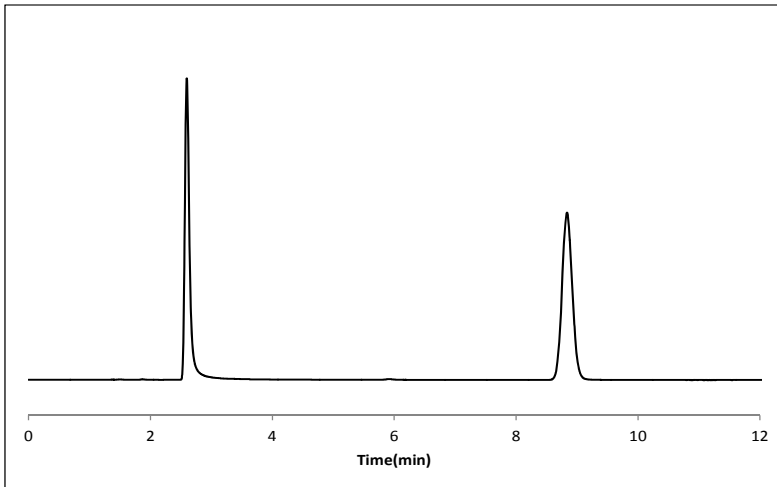
Column size :150x4.6mm I.D.
 Mobile Phase :CH₃OH/Water(70/30)
 Flow rate :1.0ml/min
 Detection :UV 254nm
 Temperature :40°C
 Sample 1:Uracil
 2:Caffeine
 3:Phenol
 4:Methyl benzoate
 5:Benzene
 6:Toluene



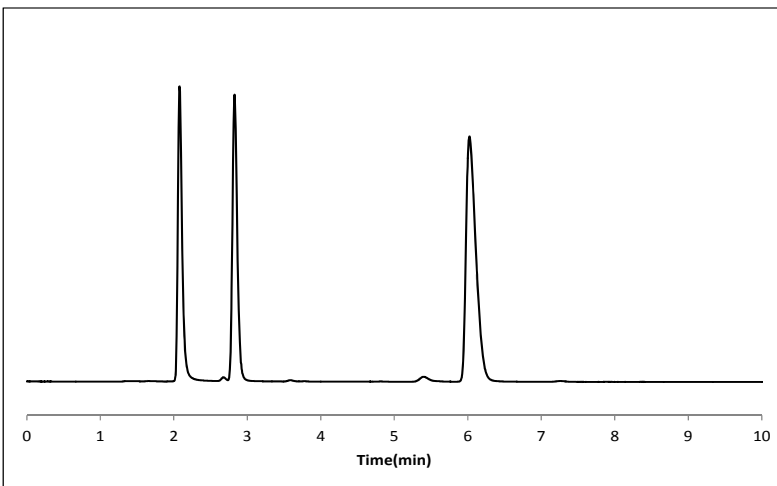
Column size :150x4.6mm I.D.
 Mobile Phase :CH₃OH/Water(80/20)
 Flow rate :1.0ml/min
 Detection :UV 254nm
 Temperature :40°C
 Sample 1:Uracil
 2:o-Terphenylen
 3:Triphenylene



Column size :150x4.6mm 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 :150x4.6mm 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 :150x4.6mm 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