

<< Develosil Column >>

TEST REPORT

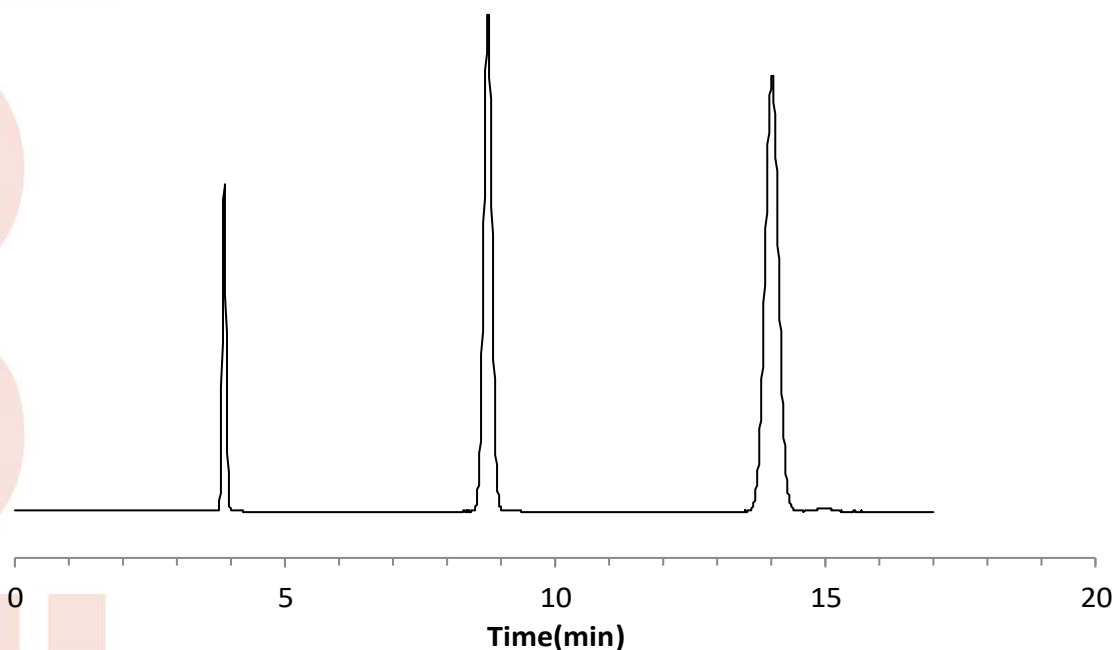
Packings	Develosil	ODS-MG, 5 μ m	Batch No.	170516
Column size	Inner diameter	4.6 mm	Length	150 mm
End fitting type	NW			
Mfg. No.	16031868-SZ			

Operating conditions

Mobile phase	:	Acetonitrile:water=70:30
Flow rate	:	1.0 mL/min
Column temp.	:	30 $^{\circ}$ C
Pressure	:	4.3 MPa
Detection	:	UV 254 nm

Sample (Order of elution)

- 1 Benzene
- 2 Fluorene
- 3 Pyrene



Theoretical plate
Asymmetry factor

$$\begin{aligned} \text{(Last peak)} \quad 5.54 \times (t_R/W_{0.5})^2 &= 14178 \\ \text{(10\% Height of Last peak)} &= 1.00 \end{aligned}$$

Mobile phase at shipment:

Acetonitrile:water=70:30

Certificate of Analysis

Develosil ODS-MG-5

Batch # 170516

Analytical Results for Develosil ODS-MG-5

Analysis of Unbonded Silica Gel		Result
Median Particle Size	[μm]	4.97
Surface Area	[m^2/g]	424
Pore Volume	[ml/g]	1.09
Median Pore Diameter	[nm]	9.43

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

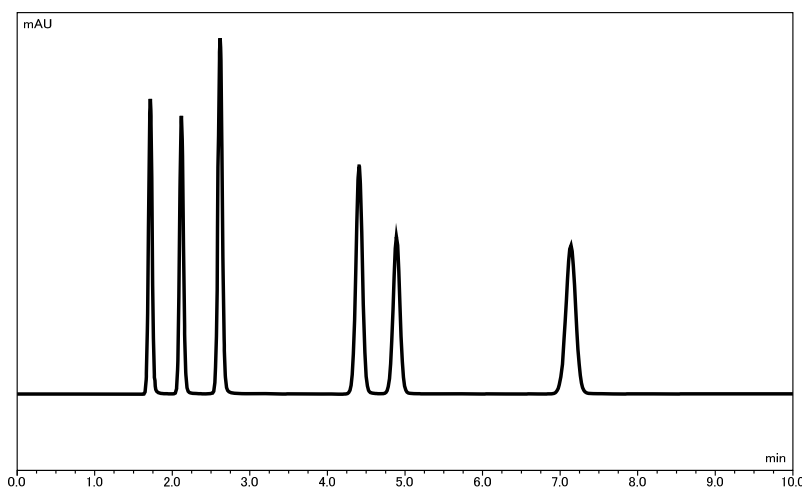
Analysis of Develosil ODS-MG-5

Total carbon	[%]	14.7
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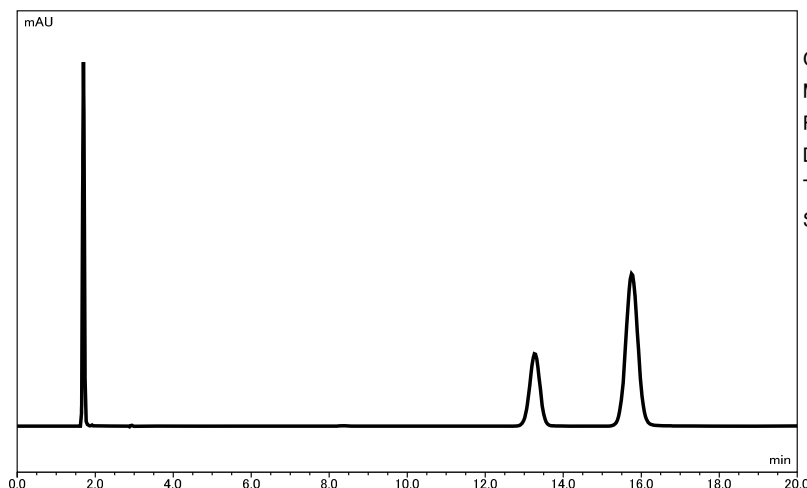
Chromatographic Results for Develosil ODS-MG-5

Separation Factor

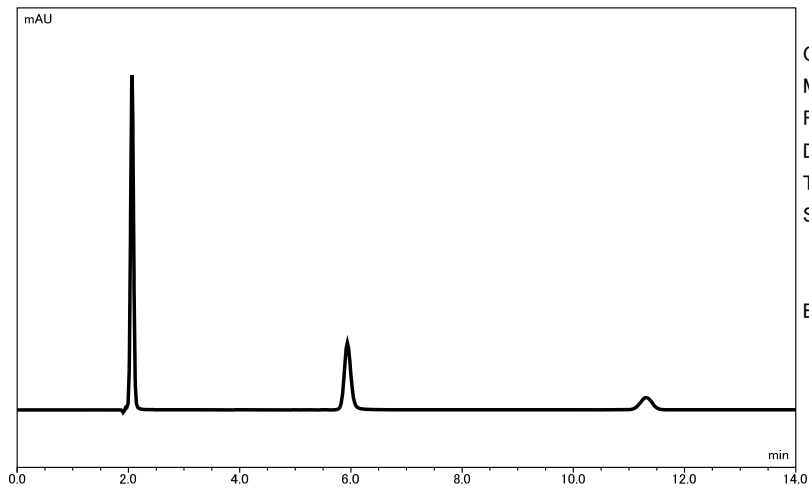
α (Caffeine/Phenol)	0.44
α (Toluene/Benzene)	1.71
α (Methyl benzoate/Toluene)	0.50
α (Triphenylene/ <i>o</i> -Terphenyl)	1.22
α (Pyridine/Phenol)	0.42
α (Oxine-Copper/Caffeine)	0.12



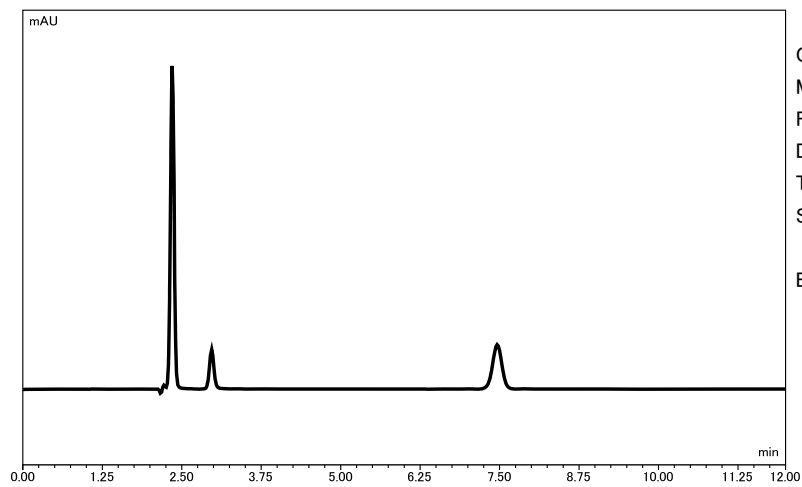
Column size :150x4.6mm I.D.
 Mobile Phase :CH₃OH/Water(70/30)
 Flow rate :1.0ml/min
 Detection :UV 254nm
 Temperature :40°C
 Sample
 1:Uracil
 2:Caffeine
 3:Phenol
 4:Methyl benzoate
 5:Benzene
 6:Toluene



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*-Terphenylene
 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:Oxine-Copper
2:Caffeine
Buffer:25mM Ammonium Phosphate (pH2.0)