

<< Develosil Column >>

TEST REPORT

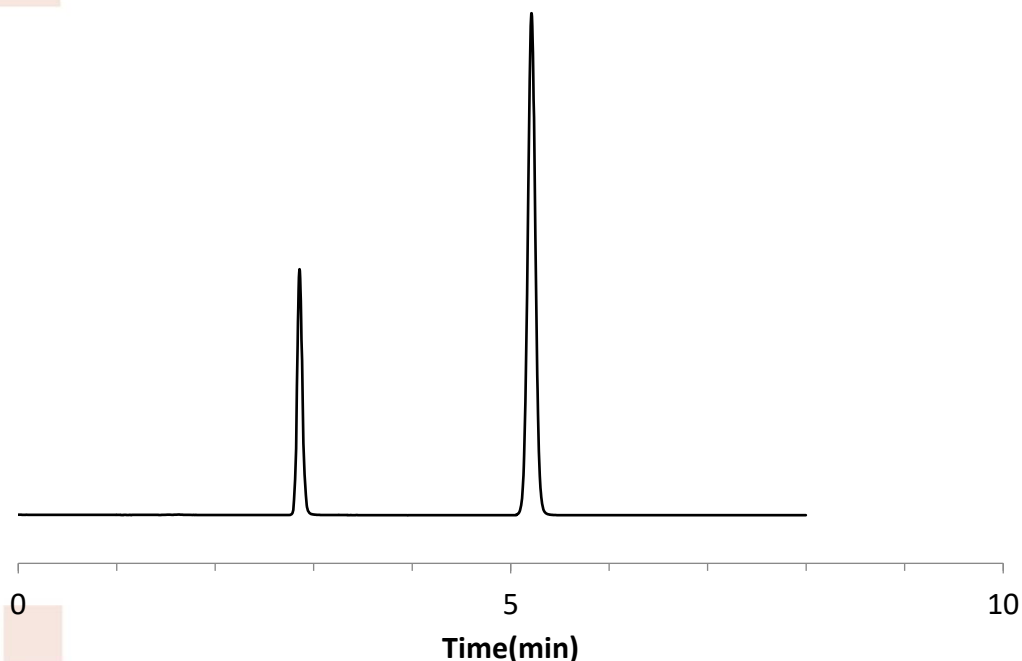
Packings	Develosil	TMS-UG, 5 μm	Batch No.	190318
Column size	Inner diameter	4.6 mm	Length	250 mm
End fitting type	NW			
Mfg. No.	30012195C-XP			

Operating conditions

Mobile phase	:	Acetonitrile:water=70:30
Flow rate	:	1.0 mL/min
Column temp.	:	30 °C
Pressure	:	5.0 MPa
Detection	:	UV 254 nm

Sample (Order of elution)

1	Uracil
2	Naphthalene



Theoretical plate	(Last peak) $5.54 \times (t_R/W_{0.5})^2 = 21700$
Asymmetry factor	(10% Height of Last peak) = 1.04

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

Certificate of Analysis

Develosil TMS-UG, 5um

Batch # 190318

Analytical Results for Develosil TMS-UG, 5um

Analysis of Unbonded Silica Gel

	Result
Median Particle Size [μm]	5.13
Surface Area [m^2/g]	306
Pore Volume [ml/g]	1.14
Median Pore Diameter [nm]	12.7

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

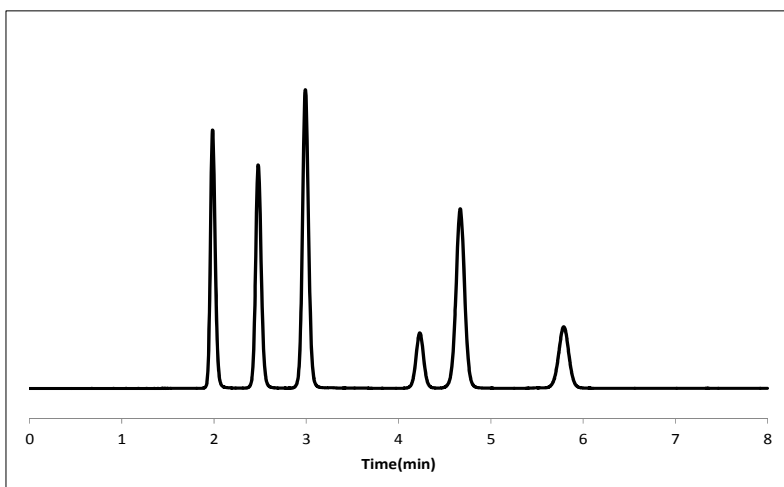
Analysis of Develosil TMS-UG, 5um

Total carbon [%]	4.36
------------------	-------------

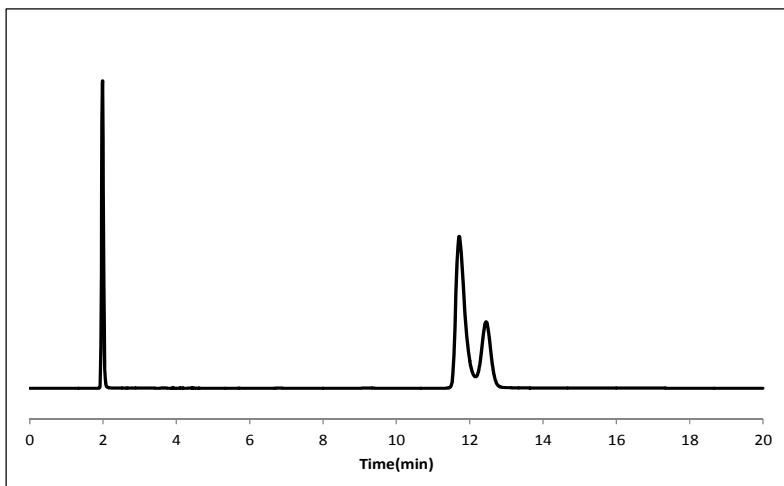
Chromatographic Results for Develosil TMS-UG, 5um

Separation Factor

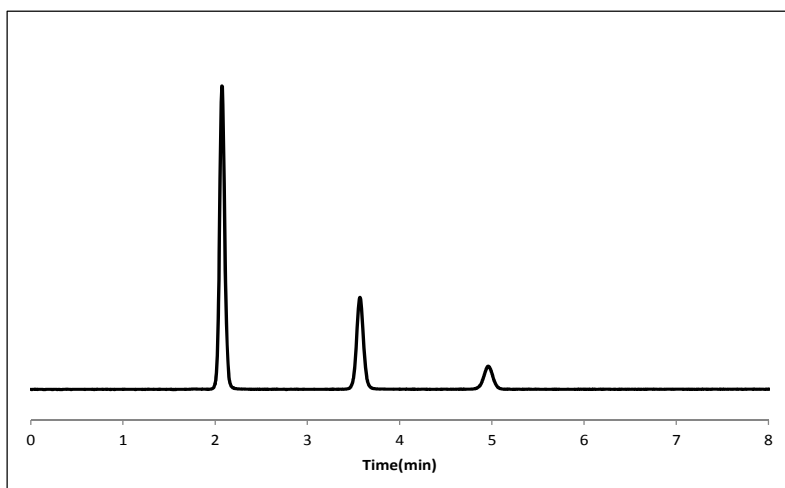
α (Caffeine/Phenol)	0.50
α (Toluene/Benzene)	1.69
α (Methyl benzoate/Toluene)	0.71
α (Triphenylene/o-Terphenyl)	0.93
α (Pyridine/Phenol)	0.52
α (Oxine-Copper/Caffeine)	0.12



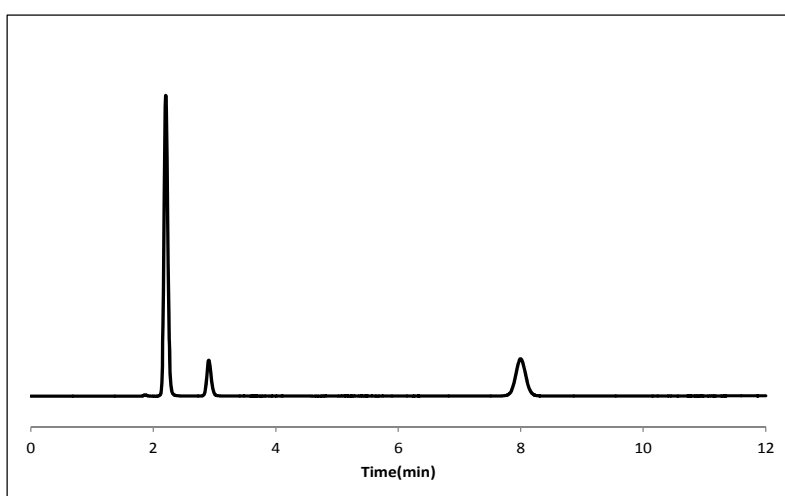
Column size :150x4.6mm I.D.
 Mobile Phase :CH₃OH/Water(50/50)
 Flow rate :1.0ml/min
 Detection :UV 254nm
 Temperature :40°C
 Sample 1:Uracil
 2:Caffeine
 3:Phenol
 4:Benzene
 5:Methyl benzoate
 6:Toluene



Column size :150x4.6mm I.D.
 Mobile Phase :CH₃OH/Water(60/40)
 Flow rate :1.0ml/min
 Detection :UV 254nm
 Temperature :40°C
 Sample 1:Uracil
 2:Triphenylene
 3:o-Terphenyl



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)