<< 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.	25012163C-XT				

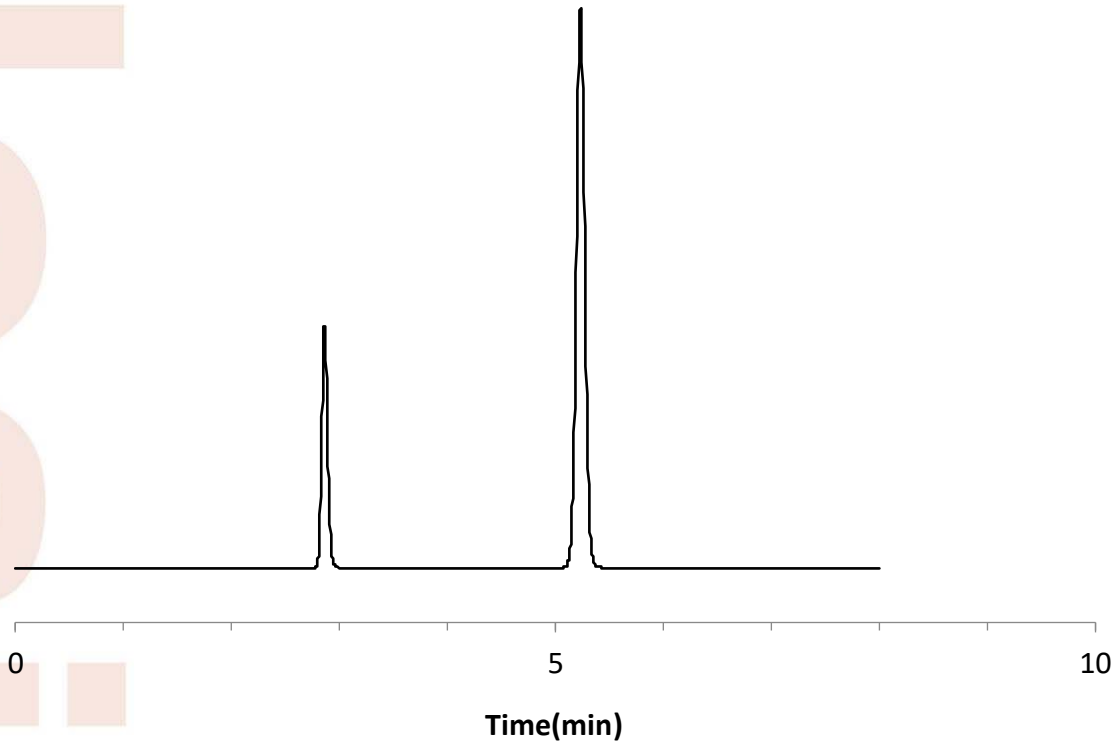
Operating conditions

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

Sample (Order of elution)

1 Uracil

2 Naphthalene



Theoretical plate (Last peak) $5.54 \times (t_R/W_{0.5})^2 = 20964$

Asymmetry factor (10% Height of Last peak) = 1.02

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

for Liquid Chromatography Develosil™
NOMURA CHEMICAL CO., LTD.
HEAD OFFICE: 15, Hinode-cho, Seto, 489-0004, Japan
TEL: 0561-48-1853 FAX: 0561-48-1434 E-mail: info@develosil.net
Web: https://www.develosil.net

Certificate of Analysis

Develosil TMS-UG, 5um **Batch # 190318**

Analytical Results for Develosil TMS-UG, 5um

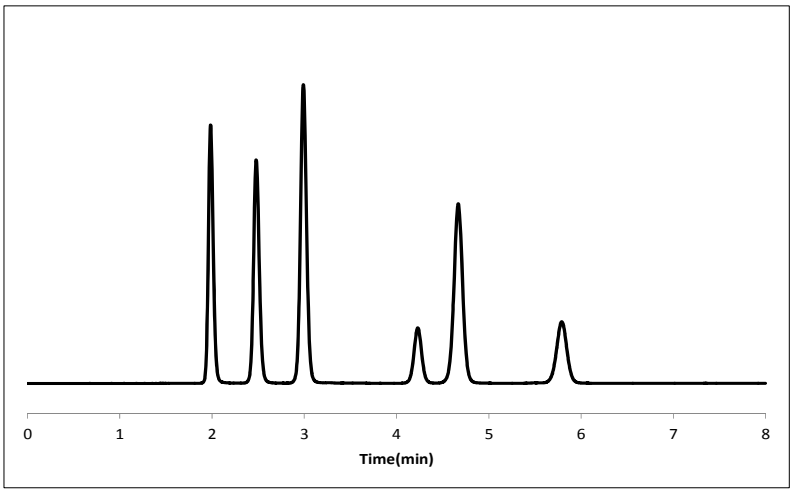
Analysis of Unbonded Silica Gel		Result
Median Particle Size	[μm]	**5.13**
Surface Area	[m^2/g]	**306**
Pore Volume	[ml/g]	**1.14**
Median Pore Diameter	[nm]	**12.7**

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

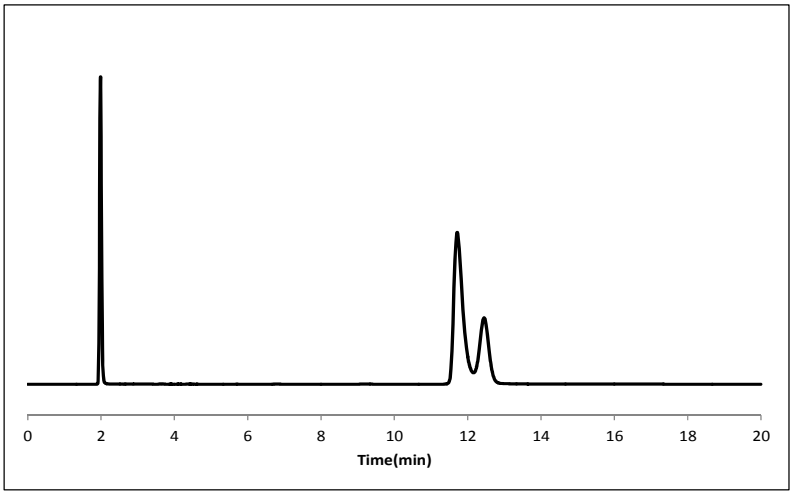
Analysis of Develosil TMS-UG, 5um		
Total carbon	[%]	**4.36**

Chromatographic Results for Develosil TMS-UG, 5um

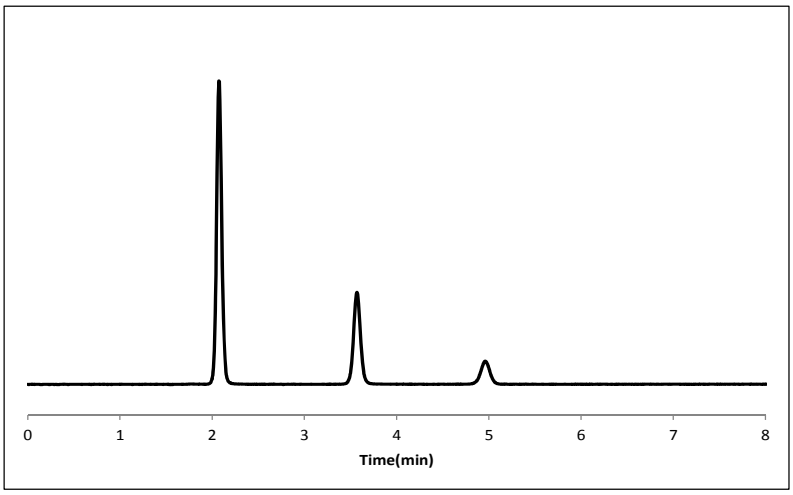
Separation Factor	
α(Caffeine/Phenol)	**0.50**
α(Toluene/Benzene)	**1.69**
α(Methyl benzoate/Toluene)	**0.71**
α(Triphenylene/o-Terphenyl)	**0.93**
α(Pyridine/Phenol)	**0.52**
α(Oxine-Copper/Caffeine)	**0.12**



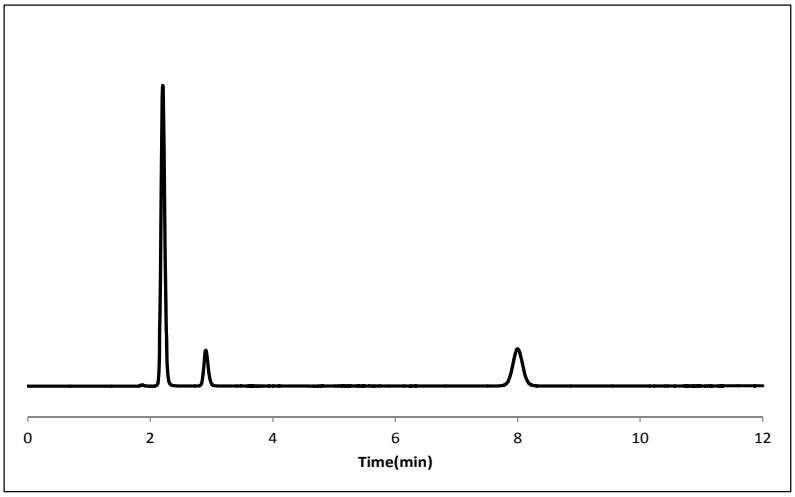
Column size :150x4.6mm I.D.
Mobile Phase :CH_3OH/Water(50/50)
Flow rate :1.0ml/min
Detection :UV 254nm
Temperature :40℃
Sample 1:Uracil
2:Caffeine
3:Phenol
4:Benzene
5:Methyl benzoate
6:Toluene



Column size :150x4.6mm I.D.
Mobile Phase :CH_3OH/Water(60/40)
Flow rate :1.0ml/min
Detection :UV 254nm
Temperature :40℃
Sample 1:Uracil
2:Triphenylene
3:o-Terphenyl



Column size :150x4.6mm I.D.
Mobile Phase :CH_3OH/Buffer(30/70)
Flow rate :1.0ml/min
Detection :UV 254nm
Temperature :40℃
Sample 1:Uracil
2:Pyridine
3:Phenol
Buffer: 25mM Ammonium Phosphate (pH7.0)



Column size :150x4.6mm I.D.
Mobile Phase :CH_3OH/Buffer(20/80)
Flow rate :1.0ml/min
Detection :UV 254nm
Temperature :40℃
Sample 1:Uracil
2:Oxine-Copper
3:Caffeine
Buffer: 25mM Ammonium Phosphate (pH2.0)