

# << Develosil Column >>

## TEST REPORT

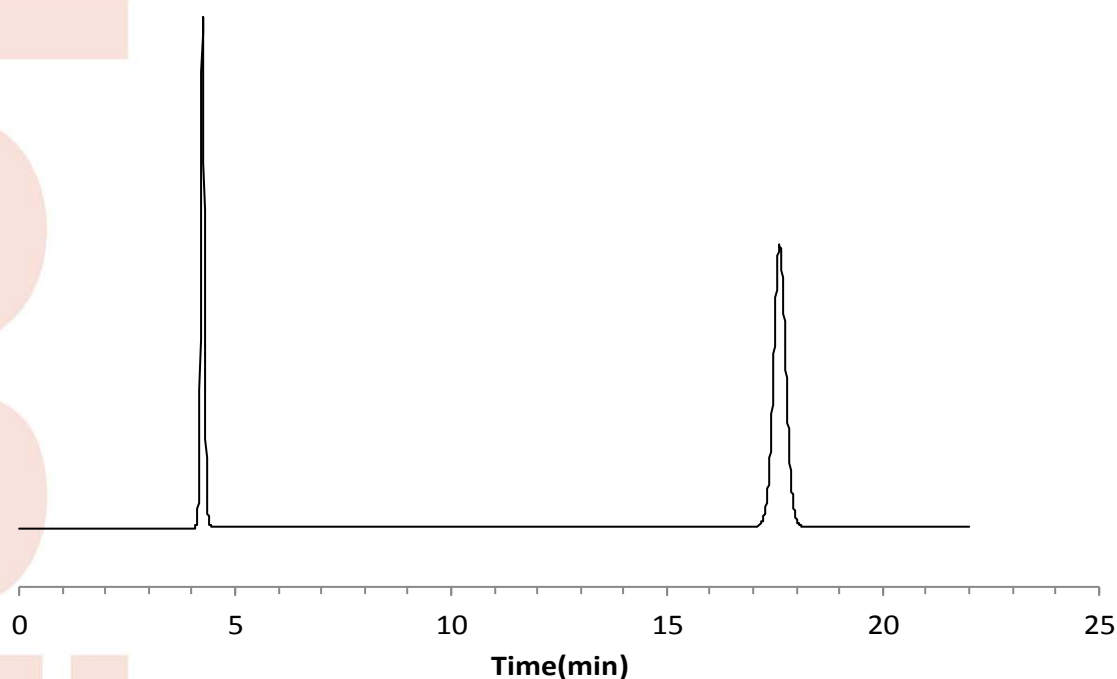
Packings	Develosil	CN-UG, 5 μm	Batch No.	150413
Column size	Inner diameter	4.6 mm	Length	250 mm
End fitting type	NW			
Mfg. No.	04121907C-WH			

### Operating conditions

Mobile phase	:	Methanol:water=40:60
Flow rate	:	0.8 mL/min
Column temp.	:	30 °C
Pressure	:	9.3 MPa
Detection	:	UV 254 nm

### Sample (Order of elution)

1	Uracil
2	Naphthalene



Theoretical plate	(Last peak)	$5.54 \times (t_R/W_{0.5})^2 = 18133$
Asymmetry factor	(10% Height of Last peak)	= 1.01

Mobile phase at shipment: Methanol:water=40:60

# Certificate of Analysis

Develosil CN-UG-5

Batch # 150413

## Analytical Results for Develosil CN-UG-5

Analysis of Unbonded Silica Gel	Result
Median Particle Size [ $\mu\text{m}$ ]	<b>5.34</b>
Surface Area [ $\text{m}^2/\text{g}$ ]	<b>334</b>
Pore Volume [ $\text{ml}/\text{g}$ ]	<b>1.11</b>
Median Pore Diameter [ $\text{nm}$ ]	<b>11.76</b>

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

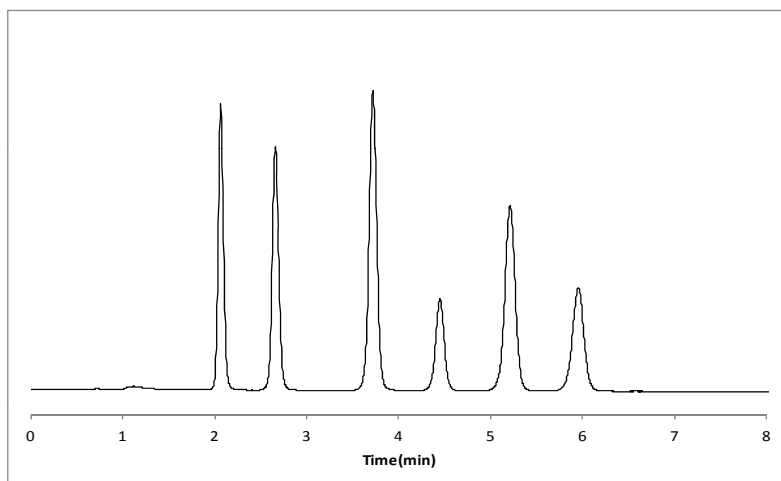
## Analysis of Develosil CN-UG-5

Total carbon [%]	<b>7.33</b>
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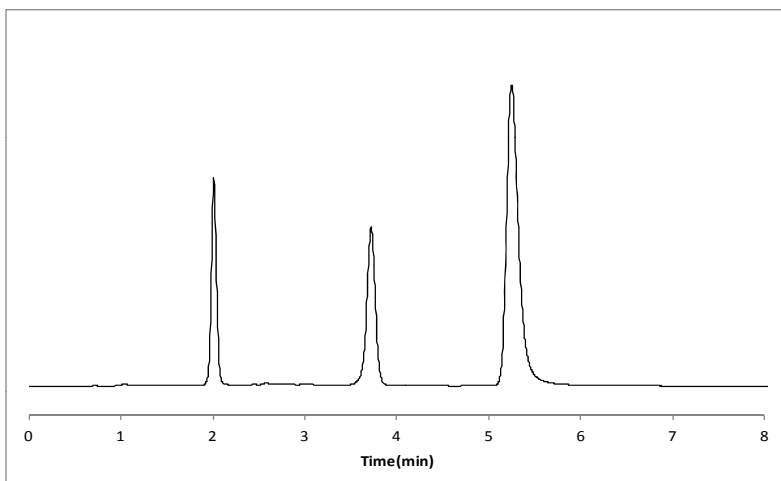
## Chromatographic Results for Develosil CN-UG-5

### Separation Factor

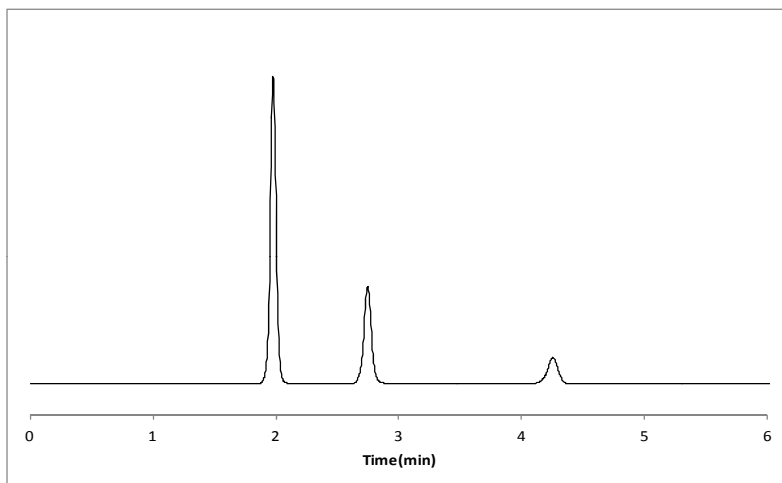
$\alpha$ (Caffeine/Phenol)	<b>0.36</b>
$\alpha$ (Toluene/Benzene)	<b>1.63</b>
$\alpha$ (Methyl benzoate/Toluene)	<b>0.81</b>
$\alpha$ (Triphenylene/O-Terphenyl)	<b>1.89</b>
$\alpha$ (Pyridine/Phenol)	<b>0.36</b>



Column size :150x4.6mm I.D.  
 Mobile Phase :CH<sub>3</sub>OH/Water(30/70)  
 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 :CH<sub>3</sub>OH/Water(65/35)  
 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 :ACN/Buffer(20/80)  
Flow rate :1.0ml/min  
Detection :UV 254nm  
Temperature :40°C  
Sample 1:Uracil  
2:Pyridine  
3:Phenol  
Buffer: 50mM Ammonium acetate (pH7.0)