

# << Develosil Column >>

## TEST REPORT

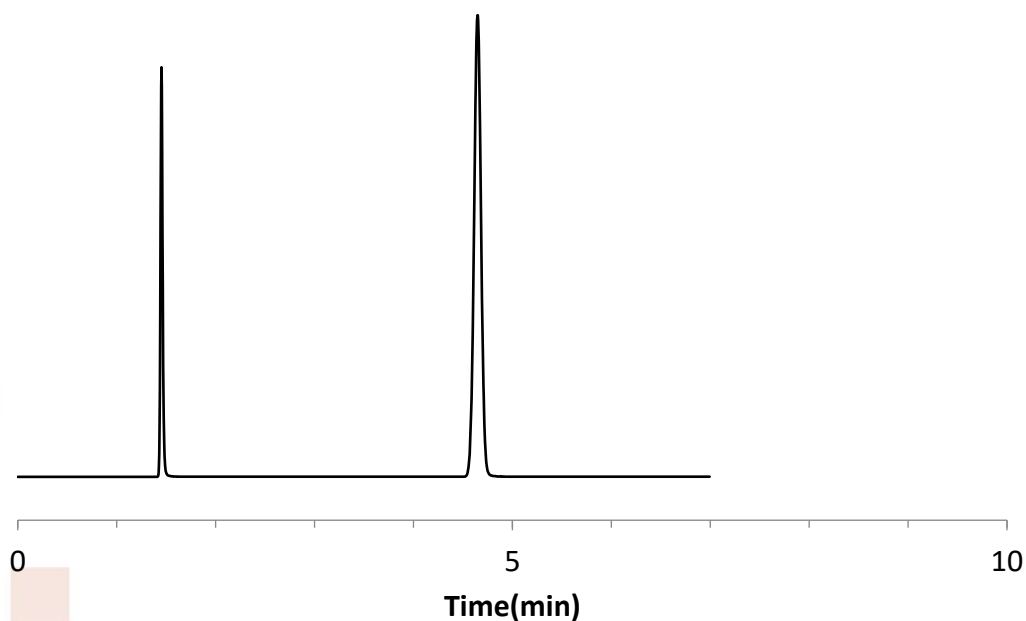
Packings	Develosil	RPAQUEUOUS, 3 μm	Batch No.	1H120520
Column size	Inner diameter	4.6 mm	Length	150 mm
End fitting type	NW			
Mfg. No.	29032164C-KO			

### Operating conditions

Mobile phase	:	Acetonitrile:water=70:30
Flow rate	:	1.0 mL/min
Column temp.	:	30 °C
Pressure	:	8.5 MPa
Detection	:	UV 254 nm

### Sample (Order of elution)

1	Uracil (0.01mg/mL)	
2	Naphthalene (0.1mg/mL)	
Injection vol.	:	1.0 uL



Theoretical plate	(Last peak) $5.54 \times (t_R/W_{0.5})^2 = 20773$
Asymmetry factor	(10% Height of Last peak) = 1.03

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

# Certificate of Analysis



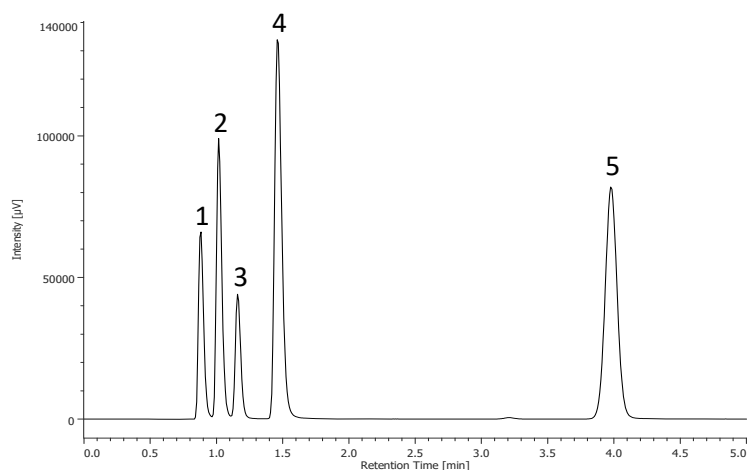
Develosil<sup>®</sup> RPAQUEOUS, 3um Batch# 1H120520

## Analytical Results for Develosil<sup>®</sup> RPAQUEOUS, 3um

Analysis of Unbonded Silica Gel		Result
Median Particle Size	[ $\mu\text{m}$ ]	3.23
Surface Area	[ $\text{m}^2/\text{g}$ ]	308
Pore Volume	[ $\text{mL}/\text{g}$ ]	1.13
Average Pore Diameter	[ $\text{nm}$ ]	12.8

Analysis of Bonded Silica Gel		
Total Carbon Content	[%]	17.9

## Chromatographic Results for Develosil<sup>®</sup> RPAQUEOUS, 3um



### Sample:

1. Uracil
2. Caffeine
3. Phenol
4. Amitriptyline
5. Naphthalene

### Analytical Conditions;

Column: Develosil RPAQUEOUS, 3um (4.6x75mm)  
Mobile phase: Methanol/25mM Ammonium Phosphate, pH3.0=70/30  
Flow rate: 1.0mL/min  
Temperature: 40°C  
Detection: UV254nm  
Sample: 1.Uracil 2.Caffeine 3.Phenol 4.Amitriptyline 5.Naphthalene  
Injection volume: 0.6 $\mu\text{L}$

<i>k</i> Naphthalene	Result
Relative retention	3.10
<i>k</i> (Caffeine/Naphthalene)	0.05
<i>k</i> (Phenol/Naphthalene)	0.09
<i>k</i> (Amitriptyline/Naphthalene)	0.19
<i>k</i> (Caffeine/Phenol)	0.50
Tailing Factor	
Amitriptyline	1.43

Approved Ikuo Yamamoto

Date: 2020.06.02