

# << Develosil Column >>

## TEST REPORT

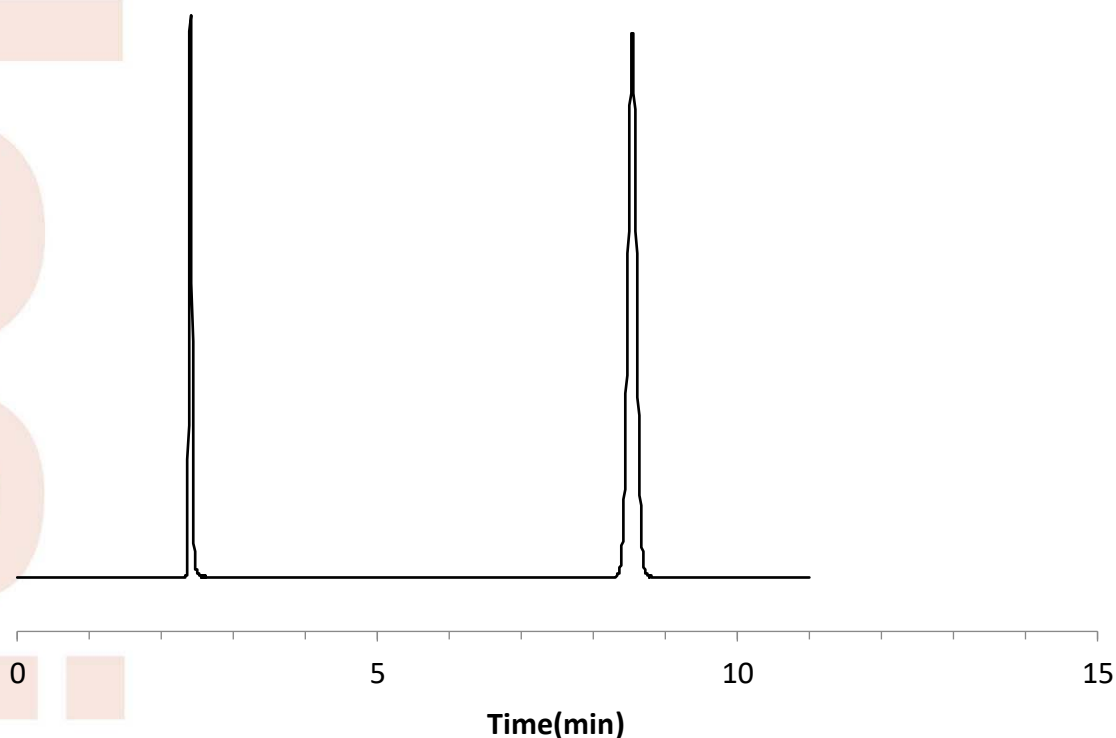
Packings	Develosil	ODS-UG, 5 μm	Batch No.	1Y270120
Column size	Inner diameter	4.6 mm	Length	250 mm
End fitting type	NW			
Mfg. No.	12102061C-MC			

### Operating conditions

Mobile phase	:	Acetonitrile:water=70:30
Flow rate	:	1.0 mL/min
Column temp.	:	30 °C
Pressure	:	6.7 MPa
Detection	:	UV 254 nm

### Sample (Order of elution)

1	Uracil
2	Naphthalene



Theoretical plate	(Last peak)	$5.54 \times (t_R/W_{0.5})^2 = 23458$
Asymmetry factor	(10% Height of Last peak)	= 0.98
Mobile phase at shipment:	Acetonitrile:water=70:30	

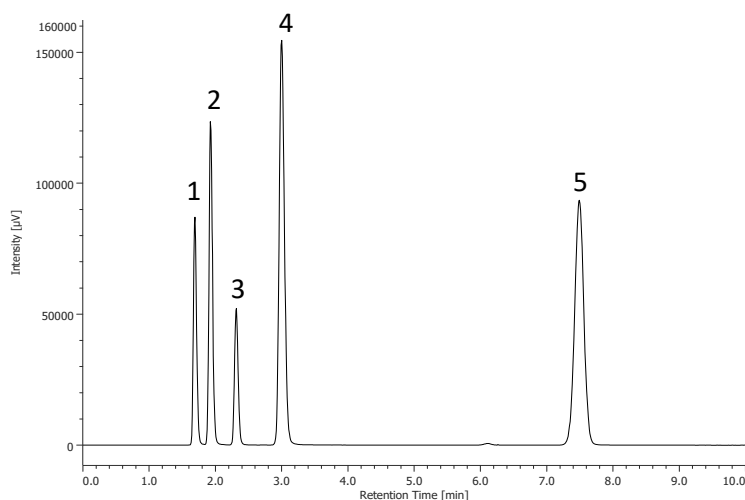
# Certificate of Analysis

Develosil® ODS-UG, 5µm Batch# 1Y270120

## Analytical Results for Develosil® ODS-UG, 5µm

Analysis of Unbonded Silica Gel		Result
Median Particle Size	[µm]	4.95
Surface Area	[m <sup>2</sup> /g]	296
Pore Volume	[mL/g]	1.06
Average Pore Diameter	[nm]	12.3
Analysis of Bonded Silica Gel		
Total Carbon Content	[%]	16.1

## Chromatographic Results for Develosil® ODS-UG, 5µm



### Sample:

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

### Analytical Conditions;

Column: Develosil ODS-UG, 5µm (4.6x150mm)  
 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: 1.0µL

<i>k</i> Naphthalene	Result
Relative retention	5.80
<i>k</i> (Caffeine/Naphthalene)	0.04
<i>k</i> (Phenol/Naphthalene)	0.11
<i>k</i> (Amitriptyline/Naphthalene)	0.23
<i>k</i> (Caffeine/Phenol)	0.39
Tailing Factor	
Amitriptyline	1.15

Approved Ikuo Yamamoto

Date: 2020.02.06