

<< Develosil Column >>

TEST REPORT

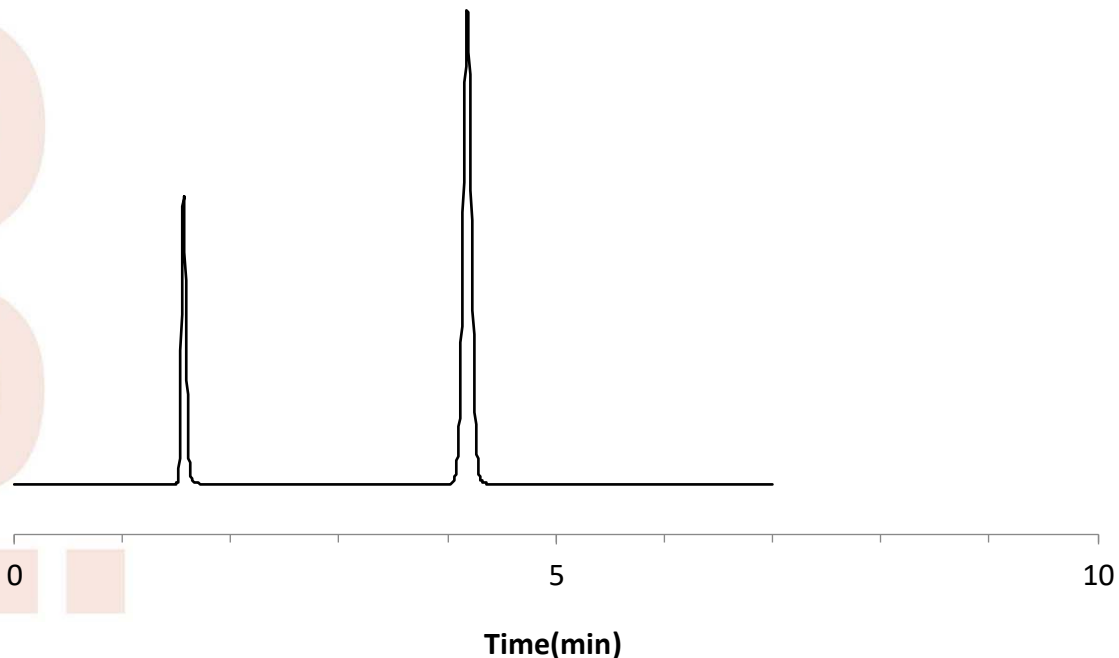
Packings	Develosil	C8-UG, 5 μ m	Batch No.	1Y010420
Column size	Inner diameter	4.6 mm	Length	150 mm
End fitting type	NW			
Mfg. No.	10112078C-XV			

Operating conditions

Mobile phase	:	Acetonitrile:water=70:30
Flow rate	:	1.0 mL/min
Column temp.	:	30 $^{\circ}$ C
Pressure	:	4.1 MPa
Detection	:	UV 254 nm

Sample (Order of elution)

1	Uracil
2	Naphthalene



Theoretical plate	(Last peak)	$5.54 \times (t_R/W_{0.5})^2 = 13050$
Asymmetry factor	(10% Height of Last peak)	= 1.01
Mobile phase at shipment:	Acetonitrile:water=70:30	

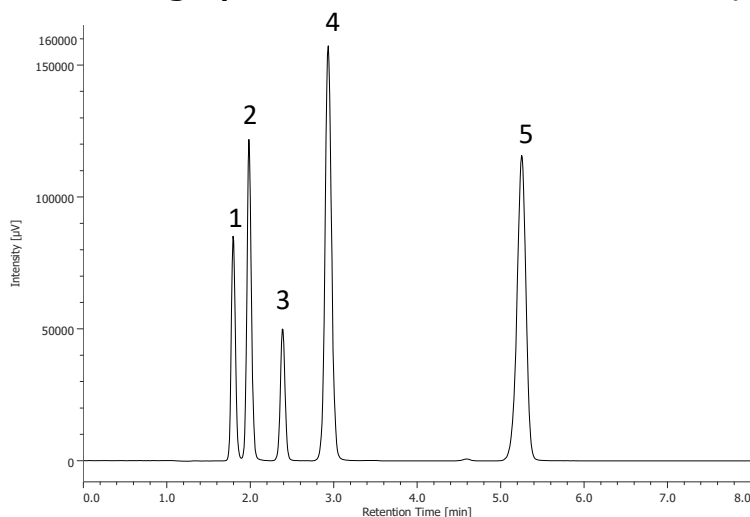
Certificate of Analysis

Develosil[®] C8-UG, 5 μ m Batch# 1Y010420

Analytical Results for Develosil[®] C8-UG, 5 μ m

Analysis of Unbonded Silica Gel		Result
Median Particle Size	[μ m]	4.95
Surface Area	[m ² /g]	296
Pore Volume	[mL/g]	1.06
Average Pore Diameter	[nm]	12.3
Analysis of Bonded Silica Gel		
Total Carbon Content	[%]	10.4

Chromatographic Results for Develosil[®] C8-UG, 5 μ m



Sample:

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

Analytical Conditions;

Column: Develosil C8-UG, 5 μ m (4.6x150mm)
 Mobile phase: Methanol/25mM Ammonium Phosphate, pH3.0=70/30
 Flow rate: 1.0mL/min
 Temperature: 40 $^{\circ}$ C
 Detection: UV254nm
 Sample: 1.Uracil 2.Caffeine 3.Phenol 4.Amitriptyline 5.Naphthalene
 Injection volume: 1.0 μ L

<i>k</i> Naphthalene	Result
Relative retention	3.46
<i>k</i> (Caffeine/Naphthalene)	0.05
<i>k</i> (Phenol/Naphthalene)	0.17
<i>k</i> (Amitriptyline/Naphthalene)	0.33
<i>k</i> (Caffeine/Phenol)	0.32
Tailing Factor	
Amitriptyline	1.06

Approved Yoshinobu Hatano

Date: 2020.04.14