

<< Develosil Column >>

TEST REPORT

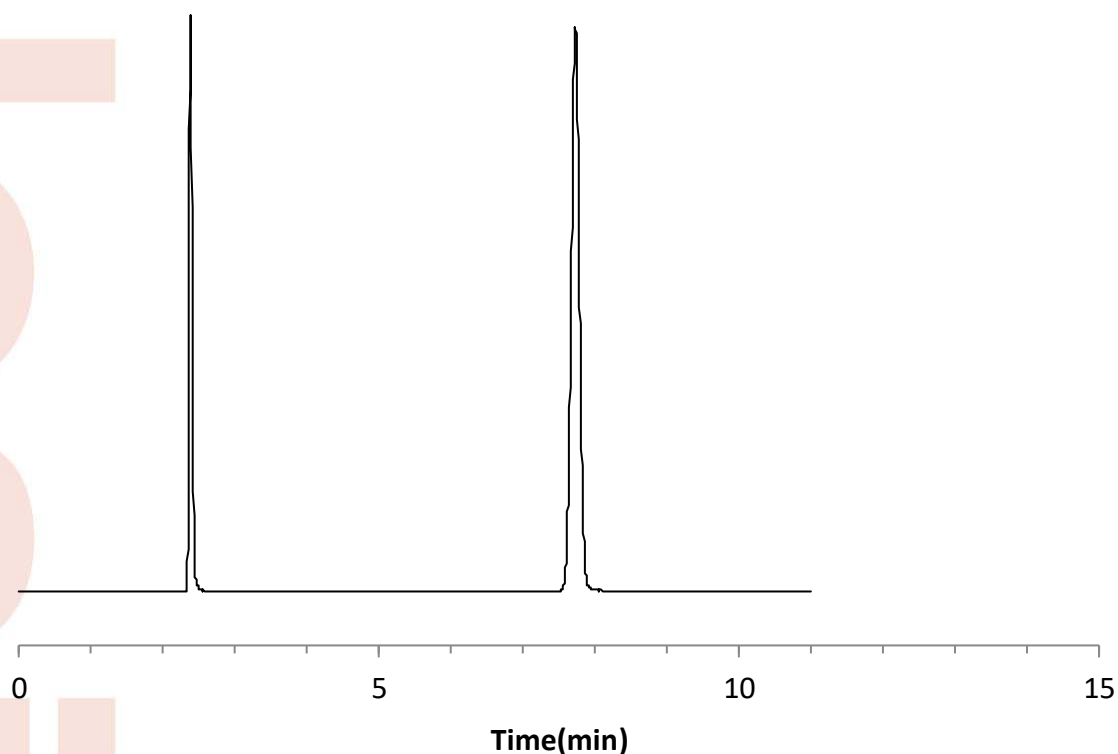
Packings	Develosil	RPAQUEOUS	Batch No.	1Y050314
Column size	Inner diameter	4.6 mm	Length	250 mm
End fitting type	NW			
Mfg. No.	17012061C-LF			

Operating conditions

Mobile phase	:	Acetonitrile:water=70:30
Flow rate	:	1.0 mL/min
Column temp.	:	30 °C
Pressure	:	5.6 MPa
Detection	:	UV 254 nm

Sample (Order of elution)

1	Uracil
2	Naphthalene



Theoretical plate	(Last peak)	$5.54 \times (t_R/W_{0.5})^2 = 22105$
Asymmetry factor	(10% Height of Last peak)	= 0.99
Mobile phase at shipment:		Acetonitrile:water=70:30

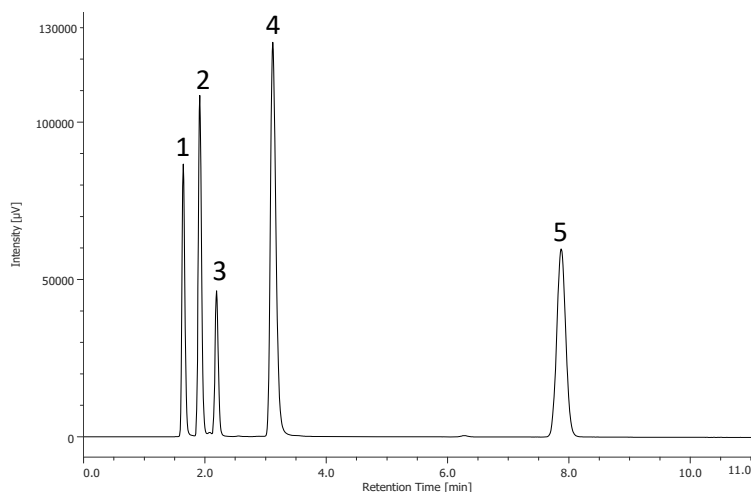
Certificate of Analysis

Develosil® RPAQUEOUS Batch# 1Y050314

Analytical Results for Develosil® RPAQUEOUS

Analysis of Unbonded Silica Gel		Result
Median Particle Size	[μm]	5.17
Surface Area	[m^2/g]	298
Pore Volume	[mL/g]	1.11
Average Pore Diameter	[nm]	13.3
Analysis of Bonded Silica Gel		
Total Carbon Content	[%]	20.7

Chromatographic Results for Develosil® RPAQUEOUS



Sample:

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

Analytical Conditions;

Column: Develosil RPAQUEOUS (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: 1.0 μL

<i>k</i> Naphthalene	Result
	6.24
Relative retention	
<i>k</i> (Caffeine/Naphthalene)	0.04
<i>k</i> (Phenol/Naphthalene)	0.09
<i>k</i> (Amitriptyline/Naphthalene)	0.24
<i>k</i> (Caffeine/Phenol)	0.51
Tailing Factor	
Amitriptyline	1.32

 Approved Ikuo Yamamoto

 Date: 2019.09.24