

<< Develosil Column >>

TEST REPORT

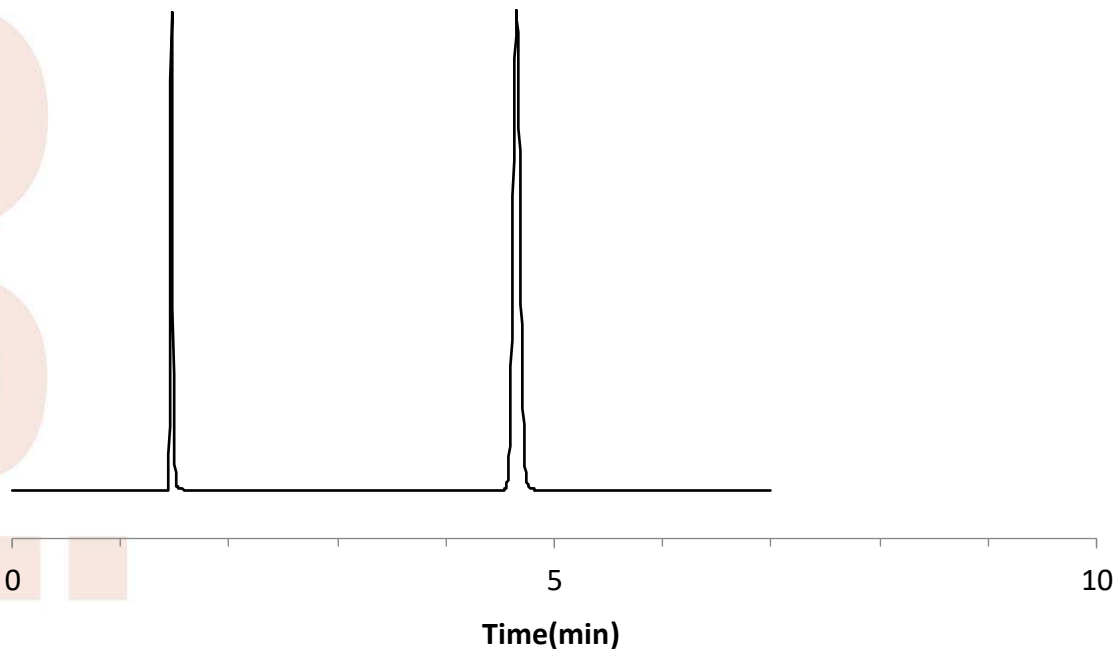
Packings	Develosil	RPAQUEOUS, 3 μ m	Batch No.	270219
Column size	Inner diameter	4.6 mm	Length	150 mm
End fitting type	NW			
Mfg. No.	28082060C-ZM			

Operating conditions

Mobile phase	:	Acetonitrile:water=70:30
Flow rate	:	1.0 mL/min
Column temp.	:	30 $^{\circ}$ C
Pressure	:	8.7 MPa
Detection	:	UV 254 nm

Sample (Order of elution)

1	Uracil
2	Naphthalene



Theoretical plate	(Last peak)	$5.54 \times (t_R/W_{0.5})^2 = 22367$
Asymmetry factor	(10% Height of Last peak)	= 1.04

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

Certificate of Analysis

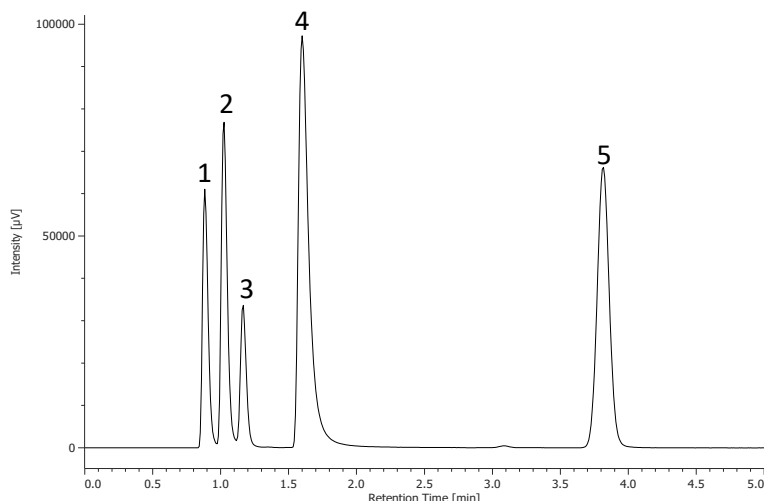


Develosil[®] RPAQUEOUS, 3 μ m Batch# 270219

Analytical Results for Develosil[®] RPAQUEOUS, 3 μ m

Analysis of Unbonded Silica Gel			Result
Median Particle Size	[μ m]		3.19
Surface Area	[m ² /g]		306
Pore Volume	[mL/g]		1.11
Average Pore Diameter	[nm]		12.5
Analysis of Bonded Silica Gel			
Total Carbon Content	[%]		17.9

Chromatographic Results for Develosil[®] RPAQUEOUS, 3 μ m



Sample:

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

Analytical Conditions;

Column: Develosil RPAQUEOUS, 3 μ m (4.6x75mm)
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: 0.6 μ L

<i>k</i> Naphthalene	Result
Relative retention	2.94
<i>k</i> (Caffeine/Naphthalene)	0.05
<i>k</i> (Phenol/Naphthalene)	0.10
<i>k</i> (Amitriptyline/naphthalene)	0.24
<i>k</i> (Caffeine/Phenole)	0.52
Tailing Factor	
Amitriptyline	1.90

Approved Ikuo Yamamoto

Date: 2019.03.13