

<< Develosil Column >>

TEST REPORT

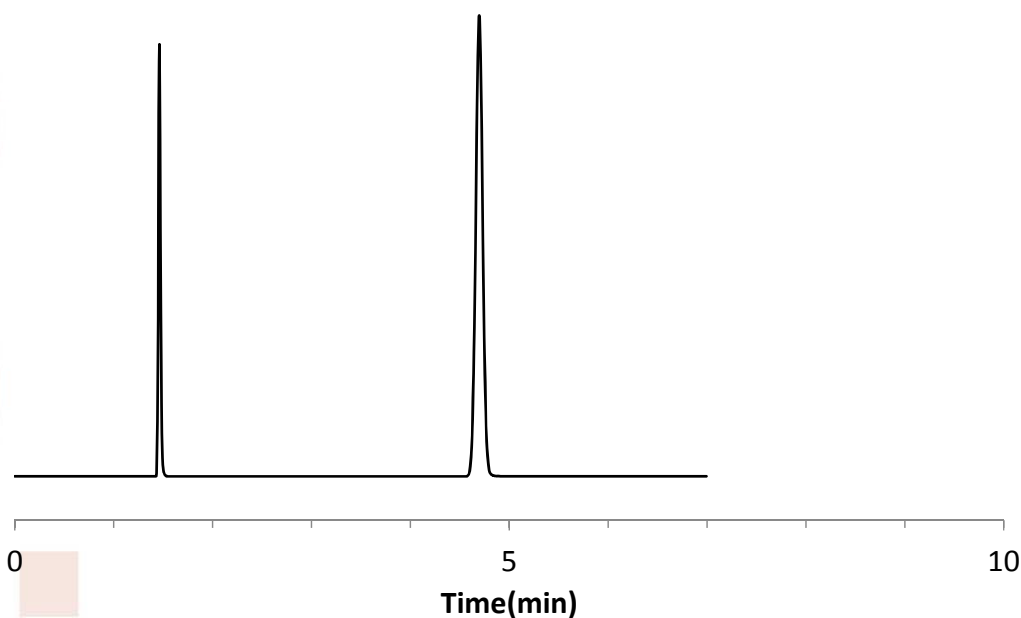
Packings	Develosil	RPAQUEOUS, 3 μm	Batch No.	1H120520
Column size	Inner diameter	4.6 mm	Length	150 mm
End fitting type	NW			
Mfg. No.	02062150C-LL			

Operating conditions

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

Sample (Order of elution)

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



Theoretical plate	(Last peak) $5.54 \times (t_R/W_{0.5})^2 = 20514$
Asymmetry factor	(10% Height of Last peak) = 1.00
Mobile phase at shipment:	Acetonitrile:water=70:30

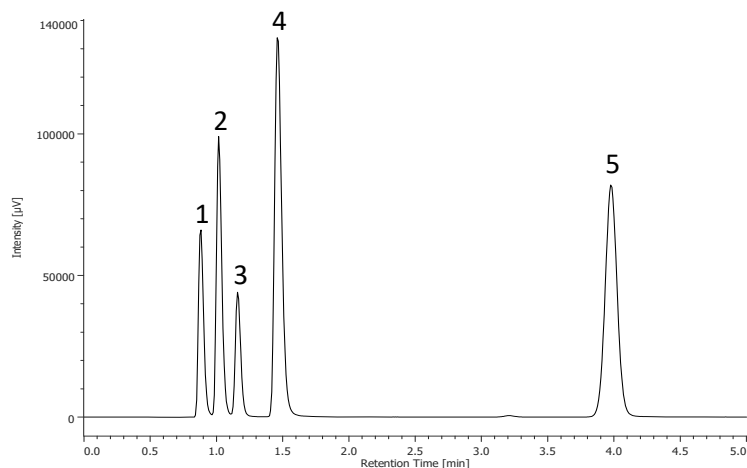
Certificate of Analysis

Develosil® RPAQUEOUS, 3um Batch# 1H120520

Analytical Results for Develosil® RPAQUEOUS, 3um

Analysis of Unbonded Silica Gel		Result
Median Particle Size	[μm]	3.23
Surface Area	[m^2/g]	308
Pore Volume	[mL/g]	1.13
Average Pore Diameter	[nm]	12.8
Analysis of Bonded Silica Gel		
Total Carbon Content	[$\%$]	17.9

Chromatographic Results for Develosil® 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 μL

<i>k</i> Naphthalene	Result
	3.10
Relative retention	
<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