

<< Develosil Column >>

TEST REPORT

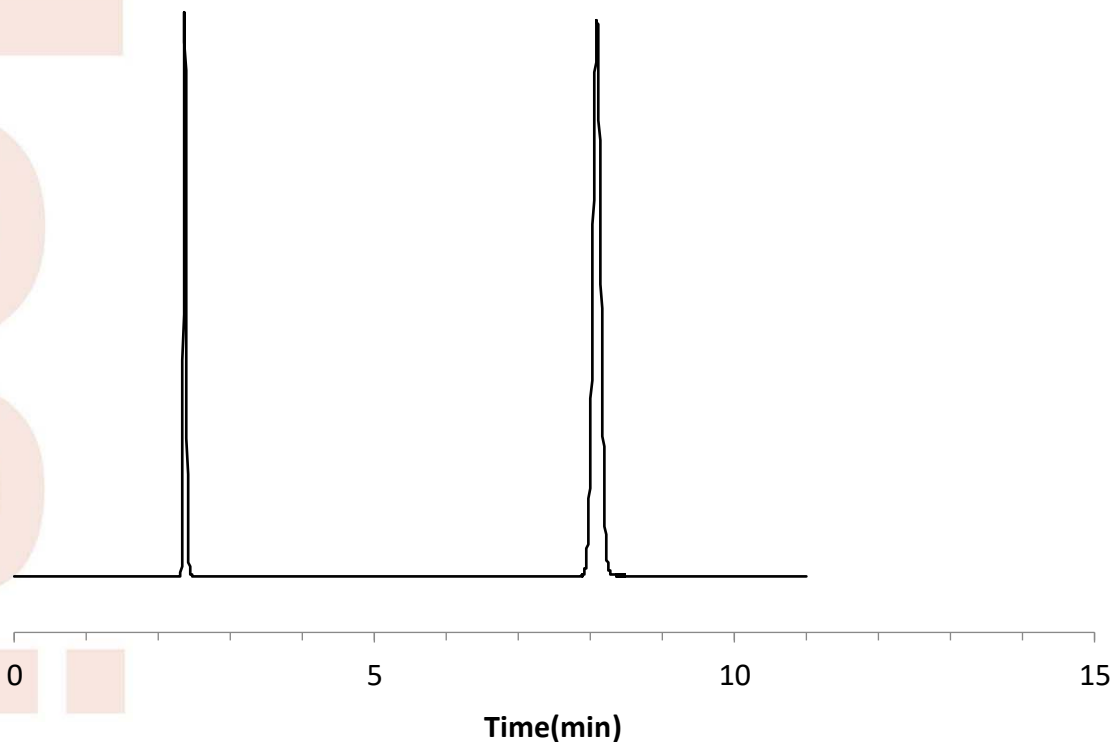
Packings	Develosil	C30-UG, 5 μm	Batch No.	1Y251119
Column size	Inner diameter	4.6 mm	Length	250 mm
End fitting type	NW			
Mfg. No.	18012180C-BS			

Operating conditions

Mobile phase	:	Acetonitrile:water=70:30
Flow rate	:	1.0 mL/min
Column temp.	:	30 °C
Pressure	:	5.9 MPa
Detection	:	UV 254 nm

Sample (Order of elution)

1	Uracil
2	Naphthalene



Theoretical plate	(Last peak)	$5.54 \times (t_R/W_{0.5})^2 = 23647$
Asymmetry factor	(10% Height of Last peak)	= 0.98

Mobile phase at shipment:	Acetonitrile:water=70:30
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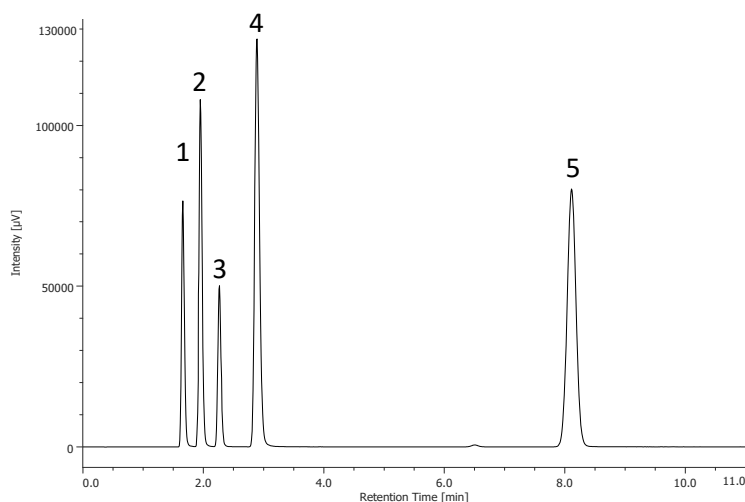
Certificate of Analysis

 Develosil[®] C30-UG, 5 μ m Batch# 1Y251119

Analytical Results for Develosil[®] C30-UG, 5 μ m

Analysis of Unbonded Silica Gel		Result
Median Particle Size	[μ m]	5.07
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	[%]	17.0

Chromatographic Results for Develosil[®] C30-UG, 5 μ m



Sample:

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

Analytical Conditions;

Column: Develosil C30-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

	Result
<i>k</i> Naphthalene	6.45
Relative retention	
<i>k</i> (Caffeine/Naphthalene)	0.04
<i>k</i> (Phenol/Naphthalene)	0.09
<i>k</i> (Amitriptyline/Naphthalene)	0.19
<i>k</i> (Caffeine/Phenol)	0.48
Tailing Factor	
Amitriptyline	1.14

 Approved Ikuo Yamamoto

 Date: 2019.12.21