

<< Develosil Column >>

TEST REPORT

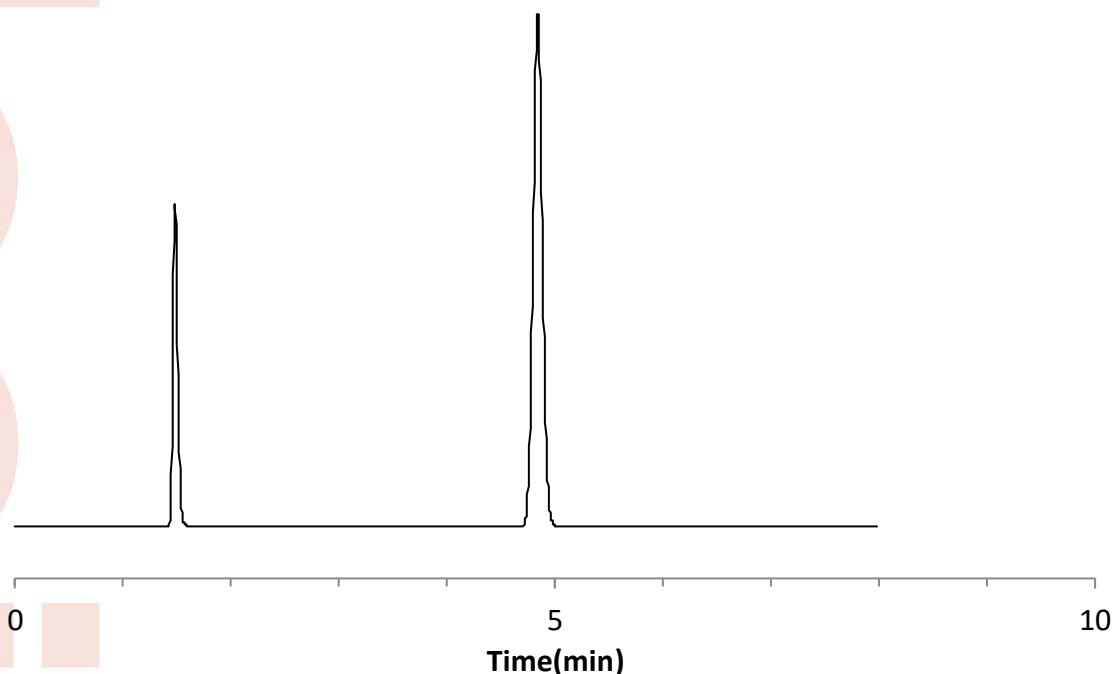
Packings	Develosil	C30-UG, 5 μ m	Batch No.	140319
Column size	Inner diameter	4.6 mm	Length	150 mm
End fitting type	NW			
Mfg. No.	27111960C-PS			

Operating conditions

Mobile phase	:	Acetonitrile:water=70:30
Flow rate	:	1.0 mL/min
Column temp.	:	30 $^{\circ}$ C
Pressure	:	3.7 MPa
Detection	:	UV 254 nm

Sample (Order of elution)

1	Uracil
2	Naphthalene



Theoretical plate	(Last peak)	$5.54 \times (t_R/W_{0.5})^2 = 14427$
Asymmetry factor	(10% Height of Last peak)	= 1.02
Mobile phase at shipment:		Acetonitrile:water=70:30

Certificate of Analysis



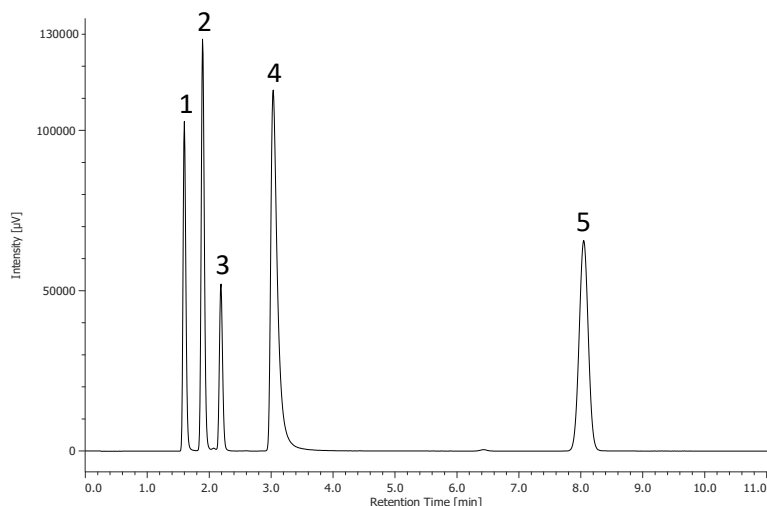
Develosil[®] C30-UG, 5 μ m Batch# 140319

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

Analysis of Unbonded Silica Gel		Result
Median Particle Size	[μ m]	5.16
Surface Area	[m ² /g]	300
Pore Volume	[mL/g]	1.07
Average Pore Diameter	[nm]	12.1

Analysis of Bonded Silica Gel		Result
Total Carbon Content	[%]	18.4

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	6.44
Relative retention	
<i>k</i> (Caffeine/Naphthalene)	0.05
<i>k</i> (Phenol/Naphthalene)	0.09
<i>k</i> (Amitriptyline/naphthalene)	0.22
<i>k</i> (Caffeine/Phenol)	0.49
Tailing Factor	
Amitriptyline	1.89

Approved Ikuo Yamamoto

Date: 2019.04.01