

<< Develosil Column >>

TEST REPORT

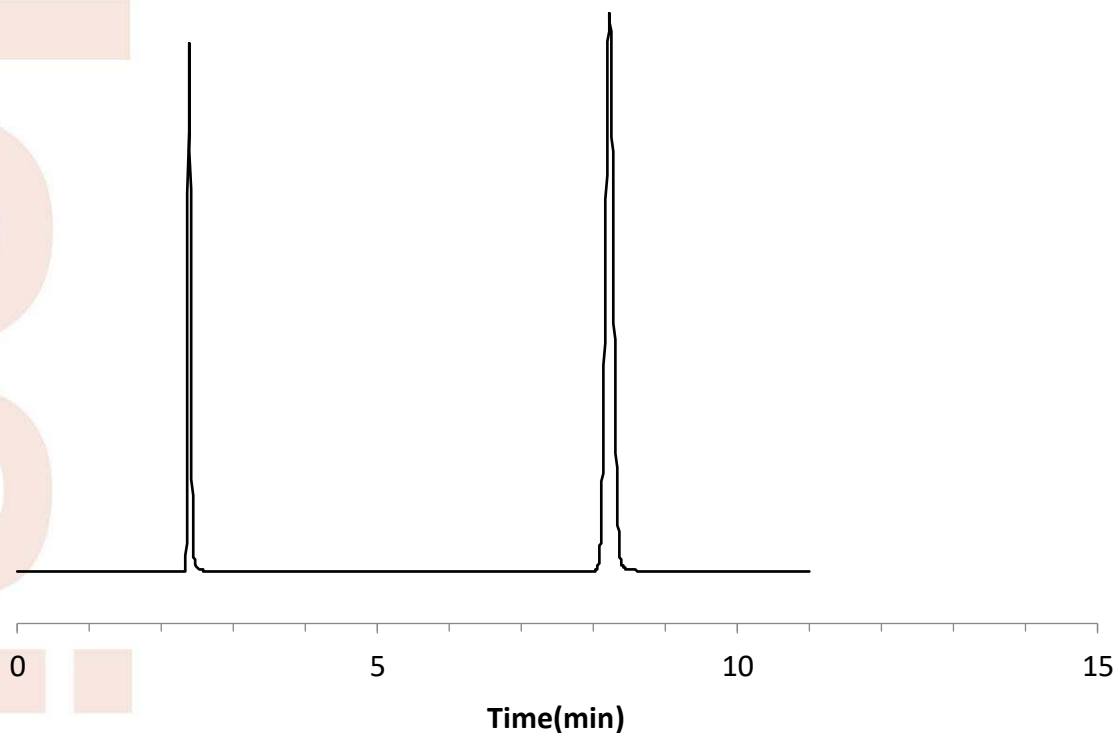
| | | | | |
|------------------|----------------|-----------|-----------|----------|
| Packings | Develosil | RPAQUEOUS | Batch No. | 1Y251119 |
| Column size | Inner diameter | 4.6 mm | Length | 250 mm |
| End fitting type | NW | | | |
| Mfg. No. | 29072074C-NK | | | |

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) | $5.54 \times (t_R/W_{0.5})^2 = 24658$ |
| Asymmetry factor | (10% Height of Last peak) | = 1.02 |
| Mobile phase at shipment: | Acetonitrile:water=70:30 | |

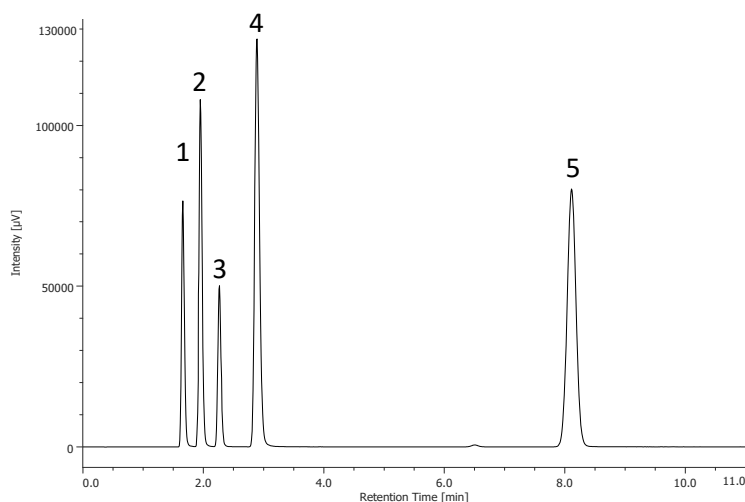
Certificate of Analysis

Develosil® RPAQUEOUS Batch# 1Y251119

Analytical Results for Develosil® RPAQUEOUS

| | | |
|---------------------------------|---------------------------|--------|
| Analysis of Unbonded Silica Gel | | Result |
| Median Particle Size | [μm] | 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® 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 |
| | 6.45 |
| 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 Ikuro Yamamoto

 Date: 2019.12.21