

<< Develosil Column >>

TEST REPORT

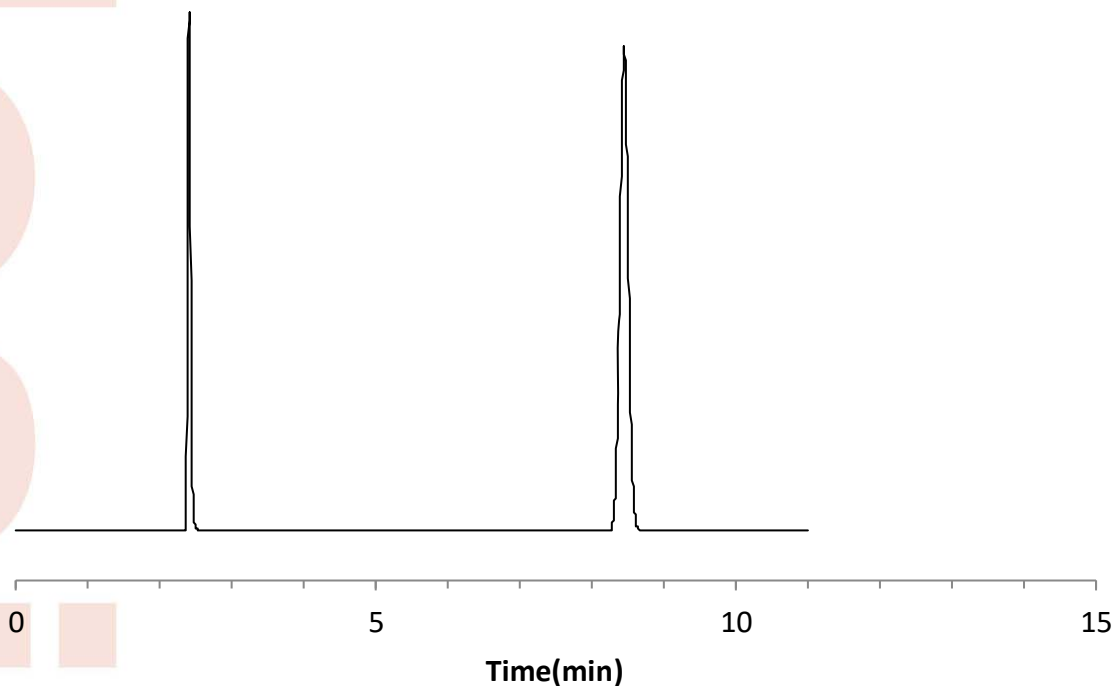
| | | | | |
|------------------|----------------|--------------|-----------|----------|
| Packings | Develosil | ODS-UG, 5 μm | Batch No. | 1Y110719 |
| Column size | Inner diameter | 4.6 mm | Length | 250 mm |
| End fitting type | NW | | | |
| Mfg. No. | 02042090C-VQ | | | |

Operating conditions

| | | |
|--------------|---|--------------------------|
| Mobile phase | : | Acetonitrile:water=70:30 |
| Flow rate | : | 1.0 mL/min |
| Column temp. | : | 30 °C |
| Pressure | : | 6.4 MPa |
| Detection | : | UV 254 nm |

Sample (Order of elution)

| | |
|---|-------------|
| 1 | Uracil |
| 2 | Naphthalene |



| | | |
|---------------------------|---------------------------|---------------------------------------|
| Theoretical plate | (Last peak) | $5.54 \times (t_R/W_{0.5})^2 = 23670$ |
| Asymmetry factor | (10% Height of Last peak) | = 1.02 |
| Mobile phase at shipment: | | Acetonitrile:water=70:30 |

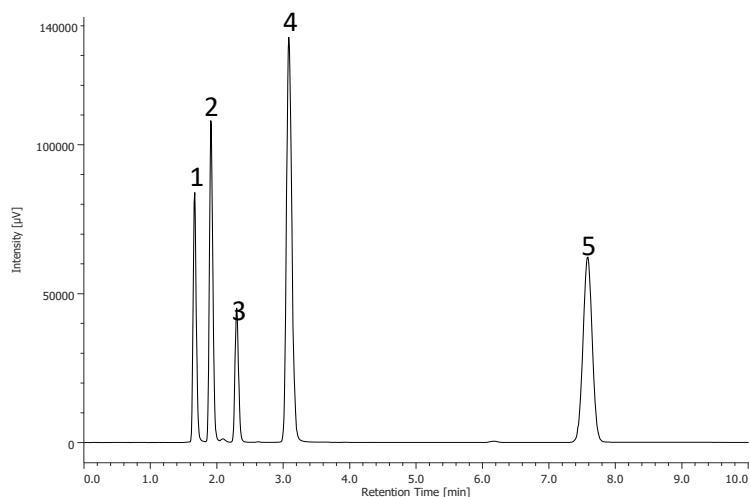
Certificate of Analysis

Develosil® ODS-UG, 5µm Batch# 1Y110719

Analytical Results for Develosil® ODS-UG, 5µm

| 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 | [%] | 16.5 |

Chromatographic Results for Develosil® ODS-UG, 5µm



Sample:

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

Analytical Conditions;

Column: Develosil ODS-UG, 5µm (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: 1.0µL

| | Result |
|--------------------------------------|--------|
| <i>k</i> Naphthalene | 5.91 |
| Relative retention | |
| <i>k</i> (Caffeine/Naphthalene) | 0.04 |
| <i>k</i> (Phenol/Naphthalene) | 0.11 |
| <i>k</i> (Amitriptyline/Naphthalene) | 0.24 |
| <i>k</i> (Caffeine/Phenol) | 0.38 |
| Tailing Factor | |
| Amitriptyline | 1.17 |

 Approved Ikuo Yamamoto

 Date: 2019.10.16