

<< Develosil Column >>

TEST REPORT

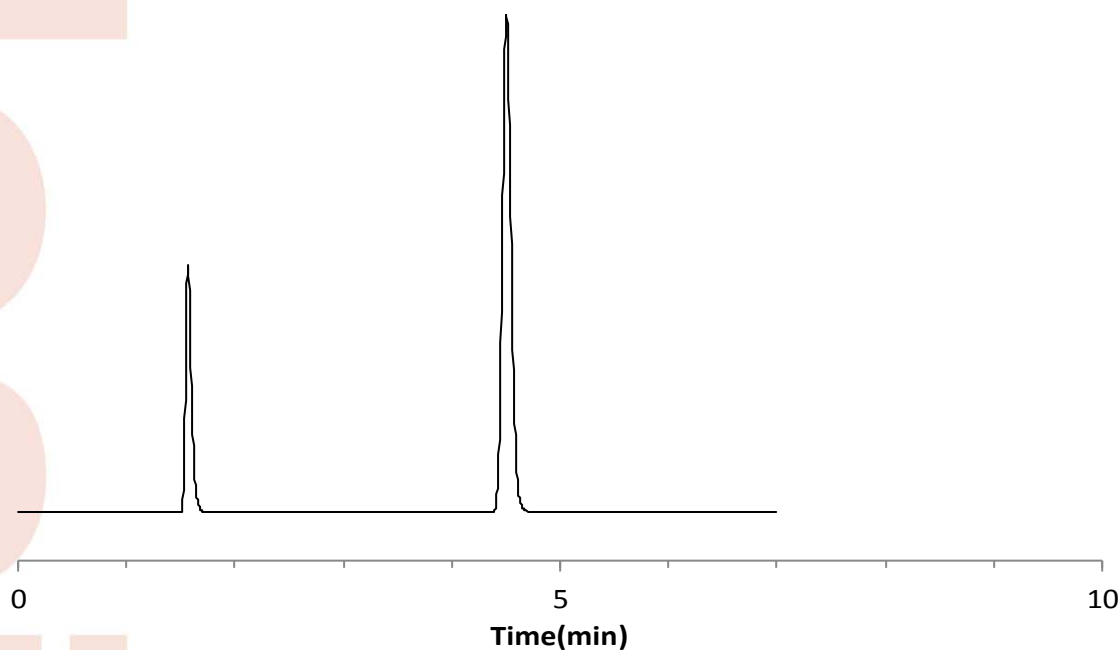
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|------------------|----------------|-------------------|-----------|--------|
| Packings | Develosil | C30-UG, 3 μ m | Batch No. | 270219 |
| Column size | Inner diameter | 2.0 mm | Length | 150 mm |
| End fitting type | NW | | | |
| Mfg. No. | 15012061C-OO | | | |

Operating conditions

| | | |
|--------------|---|--------------------------|
| Mobile phase | : | Acetonitrile:water=70:30 |
| Flow rate | : | 0.2 mL/min |
| Column temp. | : | 30 $^{\circ}$ C |
| Pressure | : | 7.7 MPa |
| Detection | : | UV 254 nm |

Sample (Order of elution)

- 1 Uracil
- 2 Naphthalene



| | | |
|-------------------|---------------------------|---------------------------------------|
| Theoretical plate | (Last peak) | $5.54 \times (t_R/W_{0.5})^2 = 15040$ |
| Asymmetry factor | (10% Height of Last peak) | = 1.14 |

Mobile phase at shipment: Acetonitrile:water=70:30

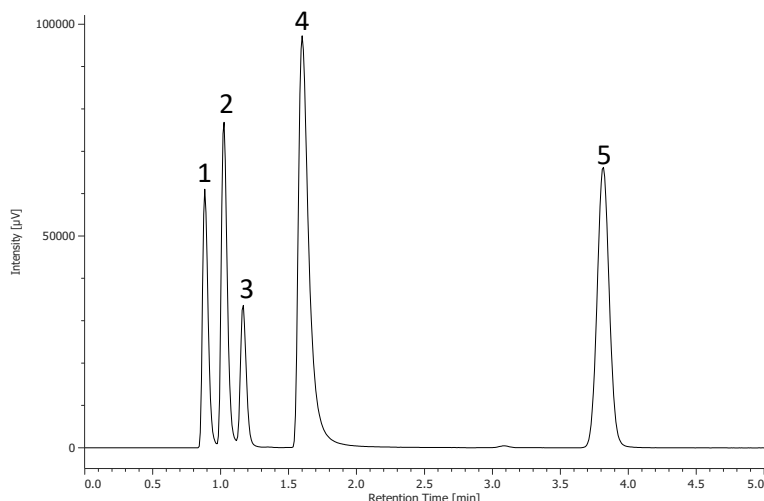
Certificate of Analysis

Develosil[®] C30-UG, 3 μ m Batch# 270219

Analytical Results for Develosil[®] C30-UG, 3 μ m

| | | |
|---------------------------------|---------------------|--------|
| Analysis of Unbonded Silica Gel | | Result |
| Median Particle Size | [μ m] | 3.19 |
| Surface Area | [m ² /g] | 306 |
| Pore Volume | [mL/g] | 1.11 |
| Average Pore Diameter | [nm] | 12.5 |
| Analysis of Bonded Silica Gel | | |
| Total Carbon Content | [%] | 17.9 |

Chromatographic Results for Develosil[®] C30-UG, 3 μ m



Sample:

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

Analytical Conditions;

Column: Develosil C30-UG, 3 μ m (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 μ L

| | |
|--------------------------------------|--------|
| <i>k</i> Naphthalene | Result |
| Relative retention | 2.94 |
| <i>k</i> (Caffeine/Naphthalene) | 0.05 |
| <i>k</i> (Phenol/Naphthalene) | 0.10 |
| <i>k</i> (Amitriptyline/naphthalene) | 0.24 |
| <i>k</i> (Caffeine/Phenole) | 0.52 |
| Tailing Factor | |
| Amitriptyline | 1.90 |

Approved Ikuo Yamamoto

Date: 2019.03.13