



Specifically qualified HPLC columns for GLP/GMP Compliance validation

Inertsil™ ODS-4V “3 µm, 5 µm”

Inertsil ODS-4 columns have proven superior worldwide for analysis of strong pharmaceutical bases, acids, chelating compounds, and zwitterions. The long-awaited validated Inertsil ODS-4V has now been added to our product lineup. Each Inertsil ODS-4V is delivered with a manufacturers' Validation Certificate showing the detailed results of every QA and QC step in manufacturing.

By choosing Inertsil ODS-4V, you can be assured that you are using one of the most trusted and enduring HPLC columns for validation.

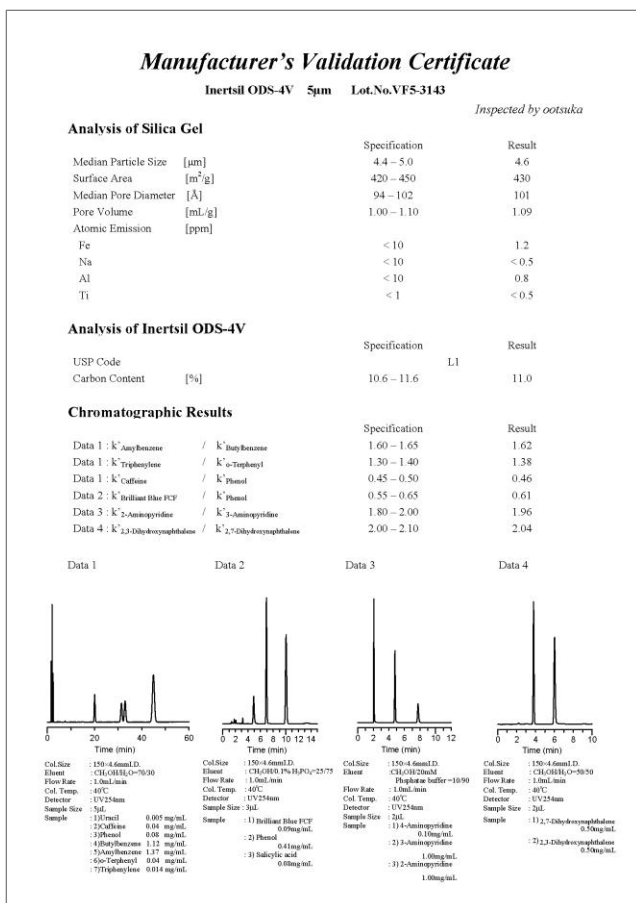
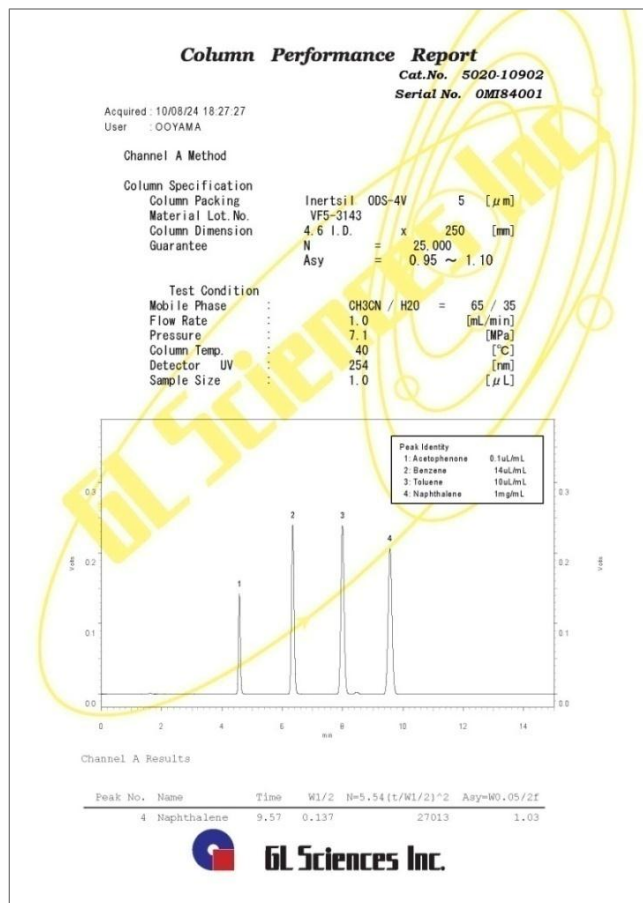
Benefits:

- ◆ Symmetric peaks for basic, acidic and chelating compounds.
- ◆ Improved Peak Shapes and Heights.
- ◆ Enhancing Sensitivity.
- ◆ High Resolution.
- ◆ Fast Re-equilibration.
- ◆ Compatible with 100% Aqueous Eluents.

Physical Properties

| | |
|-----------------|----------------------------------|
| Silica: | High Purity Spherical Silica Gel |
| Particle Size: | 3µm, 5µm |
| Surface Area: | 450 m ² / g |
| Pore Size: | 100 Å |
| Pore Volume: | 1.05 mL/g |
| Bonded Phase: | Octadecyl groups |
| End-capping: | Complete |
| Carbon Loading: | 11 % |
| USP Code: | L1 |

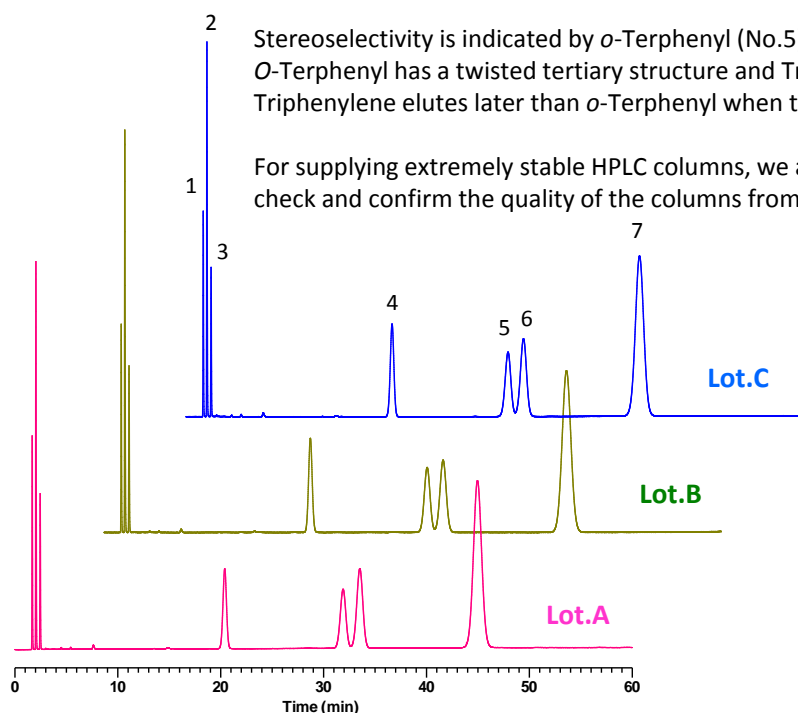
Manufacturer's Validation Certificate Sheet



Selectivity Test

The chromatograms of the selectivity test are shown below.

Sample No.4, *n*-Butylbenzene and Sample No.6, *n*-Amylbenzene were used to determine the hydrophobic property of the column. *n*-Amylbenzene elutes later than *n*-Butylbenzene when the hydrophobicity of the column is high.



Stereoselectivity is indicated by *o*-Terphenyl (No.5) and Triphenylene (No.7).

O-Terphenyl has a twisted tertiary structure and Triphenylene has a planar structure.

Triphenylene elutes later than *o*-Terphenyl when the stereoselectivity of the column is high.

For supplying extremely stable HPLC columns, we also employ other quality control tests to check and confirm the quality of the columns from various angles.

Conditions:

| | |
|----------------|--|
| Column | : Inertsil ODS-4V (5 μm,150×4.6 mmI.D.) |
| Eluent | : CH ₃ OH/H ₂ O=70/30 |
| Flow Rate | : 1.0 mL/min |
| Col. Temp. | : 40 °C |
| Detection | : UV254 nm |
| Injection Vol. | : 5 μL |
| Sample | 1. Uracil 0.005 mg/mL 2. Caffeine 0.04 mg/mL 3. Phenol 0.08 mg/mL 4. Butylbenzene 1.12 mg/mL 5. Amylbenzene 1.37 mg/mL 6. <i>o</i> -Terphenyl 0.04 mg/mL 7. Triphenylene 0.014 mg/mL |

Inertsil™ ODS-4V 3 μm Ordering information

| Length/ID (mm) | 2.1 (EUR) | 3.0 (EUR) | 4.0 (EUR) | 4.6 (EUR) |
|----------------|----------------|----------------|----------------|----------------|
| 50 | 5020-30212 441 | 5020-30222 441 | 5020-30232 441 | 5020-30242 441 |
| 75 | 5020-30213 456 | 5020-30223 456 | 5020-30233 456 | 5020-30243 456 |
| 100 | 5020-30214 461 | 5020-30224 461 | 5020-30234 461 | 5020-30244 461 |
| 150 | 5020-30215 505 | 5020-30225 505 | 5020-30235 505 | 5020-30245 505 |
| 250 | 5020-30216 550 | 5020-30226 550 | 5020-30236 550 | 5020-30246 550 |

Inertsil™ ODS-4V 5 μm Ordering information

| Length/ID (mm) | 3.0 (EUR) | 4.0 (EUR) | 4.6 (EUR) |
|----------------|----------------|-----------------|----------------|
| 150 | 5020-10921 441 | 5020-10911 441 | 5020-10901 441 |
| 250 | 5020-10922 487 | 55020-10912 487 | 5020-10902 487 |

- The use of Inertsil ODS-4V columns provides an extra measure of assurance of consistent performance from column to column and batch to batch.
- Inertsil ODS-4V columns are also available in a set of three packed with available to choose your preferable combination from 3 different batches to assist in reproducibility studies.

- The specification and the column type are subject to change without notice due to continual improvements.
- All brand names and product names are trademarks or registered trademarks of GL Sciences Inc.

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