



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.

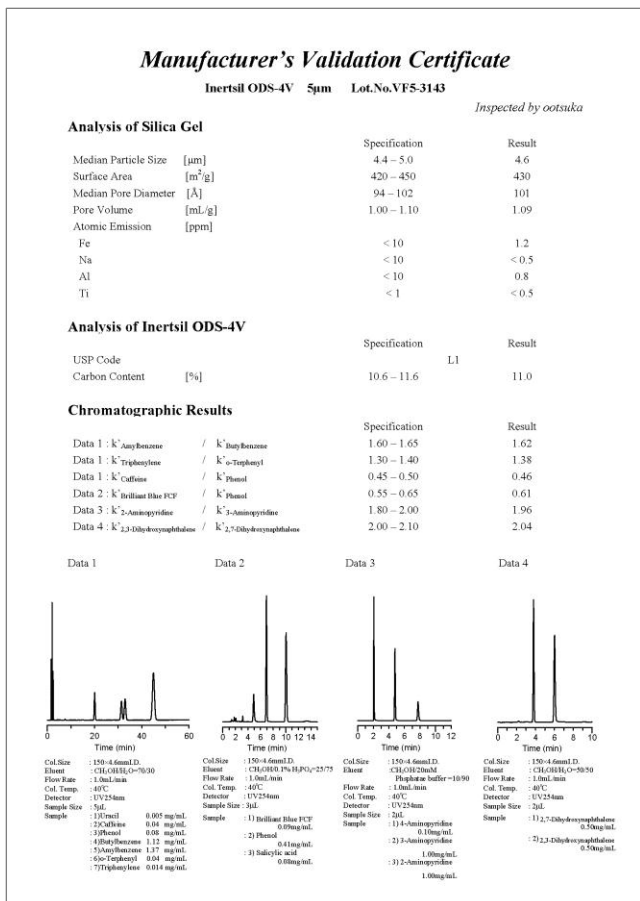
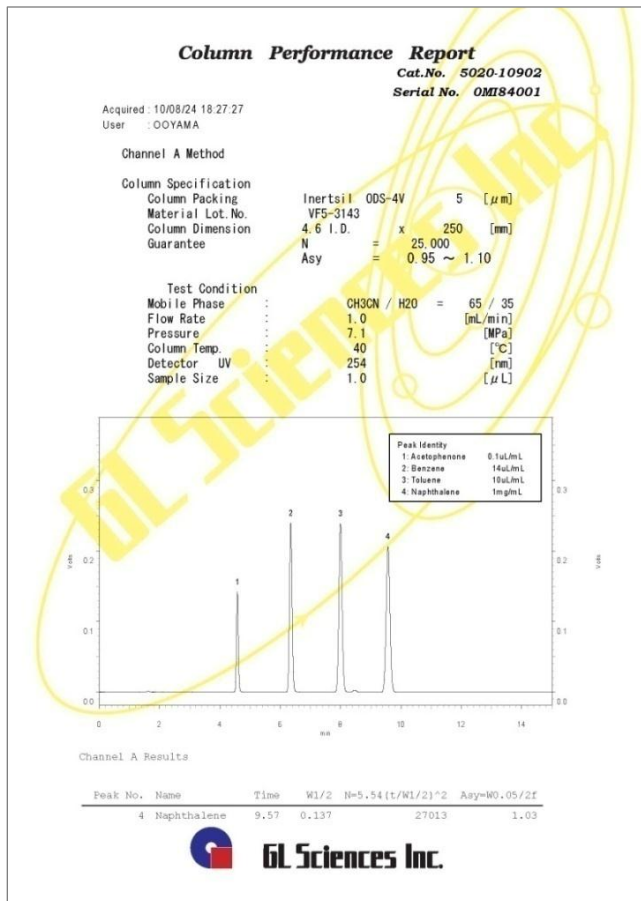
### Benefits:

- ◆ 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 <sup>2</sup> / 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.

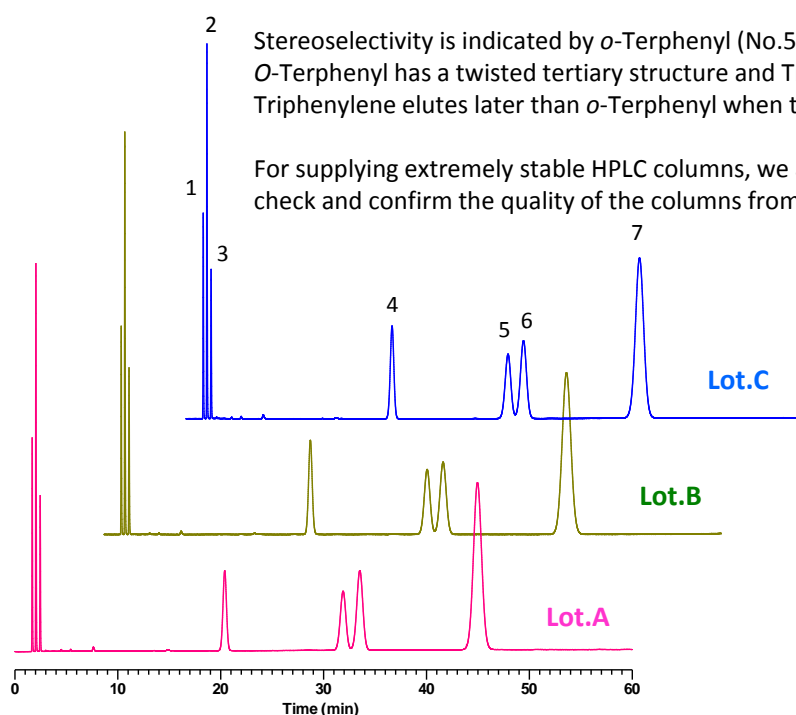
Sample No.4, *n*-Butylbenzene and Sample No.6, *n*-Amylbenzene were used to determine the hydrophobic property of the column. *n*-Amylbenzene elutes later than *n*-Butylbenzene when the hydrophobicity of the column is high.

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 <sub>3</sub> OH/H <sub>2</sub> 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	3.0	4.0	4.6
50	5020-30212	5020-30222	5020-30232	5020-30242
75	5020-30213	5020-30223	5020-30233	5020-30243
100	5020-30214	5020-30224	5020-30234	5020-30244
150	5020-30215	5020-30225	5020-30235	5020-30245
250	5020-30216	5020-30226	5020-30236	5020-30246

## Inertsil™ ODS-4V 5 μm Ordering information

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

- 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.