

## The Highest Inertness has been achieved on silica base HPLC columns for Most Critical Analyses

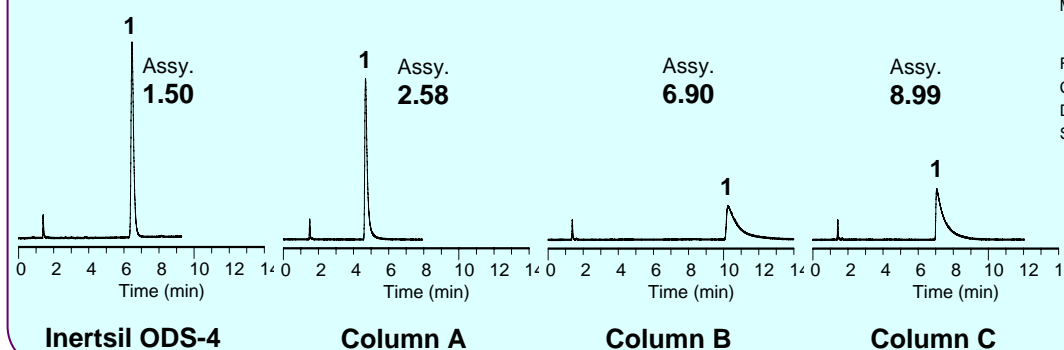
Inertsil ODS-4 is a C18 column developed focusing on superb inertness to basic, acidic, neutral and chelating compounds, which can virtually provide perfect peak shapes for any type of compounds.

### Basic Compound

#### Analytical Conditions

Column: 5µm 150X4.6mm I.D.  
 Mobile Phase: A) CH<sub>3</sub>CN  
 B) 25mM Phosphate buffer ; pH7.0  
 (A / B) = (40 / 60)  
 Flow Rate: 1.0 mL/min  
 Col.Temp.: 40C  
 Detector : UV at 220 nm  
 Sample : 1.0 uL ( 0.1 mg / mL )  
 1) Dextromethorphan hydrobromide

Analysis of a highly basic compound. Poor peak shapes are observed when the packing material contains residual silanol groups or by-products that were generated during the synthesis of the packing material.

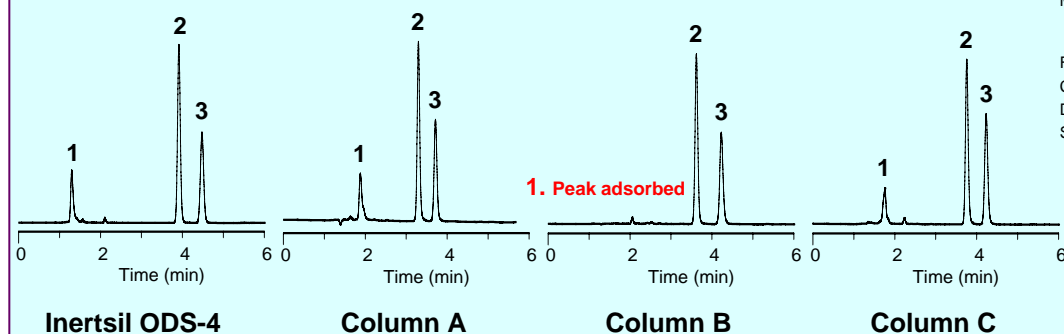


### Acidic Compounds

#### Analytical Conditions

Column: 5µm 150X4.6mm I.D.  
 Mobile Phase: A) CH<sub>3</sub>CN  
 B) 0.1% H<sub>3</sub>PO<sub>4</sub>  
 (A / B) = (40 / 60)  
 Flow Rate: 1.0 mL/min  
 Col.Temp.: 40C  
 Detector: UV at 254 nm  
 Sample: 3.0 uL  
 1) Brilliant Blue FCF (0.05 mg / mL)  
 2) Phenol (0.3 mg / mL)  
 3) Salicylic acid (0.2 mg / mL)

Sample 1. is a highly acidic compound. When the surface of the packing material is neutral, it provides an excellent peak shape which is ideal for quantitative determination.

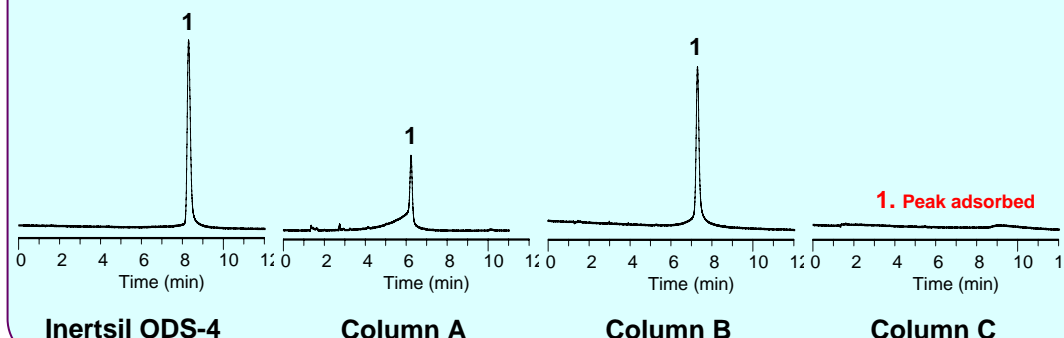


### Chelating Compound

#### Analytical Conditions

Column: 5µm 150X4.6mm I.D.  
 Mobile Phase: A) CH<sub>3</sub>CN  
 B) 0.1% H<sub>3</sub>PO<sub>4</sub>  
 (A / B) = (40 / 60)  
 Flow Rate: 1.0 mL/min  
 Col.Temp.: 40C  
 Detector: UV at 254 nm  
 Sample: 1.0 uL (0.1 mg / mL)  
 1) β-Thujaplicin ( Hinokitiol )

Analysis of a highly chelating compound. An unusual peak shape is observed when the surface of the packing material contains metals.



## Feature

## Physical Properties

### - Perfect End-capping technique

A newly developed state-of-the-art end-capping technique ideally deactivates the residual silanol groups, resulting in preventing adsorption of highly basic compounds. In addition, since the surface of the packing material is neutral, adsorption of neutral and highly acidic compounds does not occur.

### - Intensive elimination of trace metals on the silica gel surface

When analyzing chelating compounds, it can be analyzed without any masking operations to those metals that are exposed on the surface of the packing material.

### - Extreme durability to acidic mobile phase conditions

### - High stability to 100% aqueous mobile phase conditions

Silica:	High Purity Spherical Silica Gel
Purity:	99.999%
Particle Size:	5um
Surface Area:	450 m <sup>2</sup> /g
Pore Volume:	100A
Pore Size:	1.05 mL/g
Bonded Phase:	Octadecyl groups
End-capping:	Yes
Carbon Loading:	11%
USP Code:	L1

## Analytical / Preparative Column Ordering Information

ID (mm)	1.0	1.5	2.1	3.0	4.0	4.6
Length (mm)	Cat.No	Cat.No	Cat.No	Cat.No	Cat.No	Cat.No
30	5020-81011	5020-81021	5020-03911	5020-03921	5020-03931	5020-03941
50	5020-81012	5020-81022	5020-03912	5020-03922	5020-03932	5020-03942
75	5020-81013	5020-81023	5020-03913	5020-03923	5020-03933	5020-03943
100	5020-81014	5020-81024	5020-03914	5020-03924	5020-03934	5020-03944
150	5020-81015	5020-81025	5020-03915	5020-03925	5020-03935	5020-03945
250	5020-81016	5020-81026	5020-03916	5020-03926	5020-03936	5020-03946

ID (mm)	6.0	7.6	10.0	20.0
Length (mm)	Cat.No	Cat.No	Cat.No	Cat.No
Guard 50	5020-03957	5020-03967	5020-81057	5020-81067
100	5020-03954	5020-03964	5020-81054	5020-81064
150	5020-03955	5020-03965	5020-81055	5020-81065
250	5020-03956	5020-03966	5020-81056	5020-81066

\* End-fitting is Waters 1/16" type.

\* For other column sizes, please send us an enquiry. (Upon request)

## Cartridge Guard Column Ordering Information

Description	Analytical Column ID (mm) Size	Guard Column ID (mm) Size	Guard Column Length (mm)	Cartridge Guard Column E (2EA. / Set)	Cartridge Guard Column E Holder Set (2 Cartridges & 1 Holder)
				Cat.No	Cat.No
Cartridge Guard Column E	1.0 mm	1.0 mm	10 mm	5020-08517	5020-08527
	1.5, 2.1 mm	1.5 mm	10 mm	5020-08518	5020-08528
	3.0 mm	3.0 mm	10 mm	5020-08515	5020-08525
			20 mm	5020-08565	5020-08575
	4.0, 4.6 mm	4.0 mm	10 mm	5020-08510	5020-08520
			20 mm	5020-08560	5020-08570
Non-Metal Cartridge Guard Column E	1.0, 1.5 mm	1.0 mm	10 mm	5020-08663	5020-08673
	2.1 mm	2.1 mm	10 mm	5020-08662	5020-08672
	3.0 mm	3.0 mm	10 mm	5020-08661	5020-08671
	4.0, 4.6 mm	4.0 mm	10 mm	5020-08660	5020-08670

\* When ordering, please specify the packing material.

\* Only Waters 1/16" end-fitting type is compatible for our Cartridge Guard Column E.

\* Conventional Guard Columns and GL-Cart Guard Columns are also available.

\* For more information, please feel free to contact us.

• The specification and the column type are subject to change without notice due to continual improvements.

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