

New!

HPLC, LC/MS Columns

Inertsil® ODS-HL

Ultra High Retentivity

Ideal for Separation of Basic Molecules & its Related Substances, Process Impurities

Physical Properties

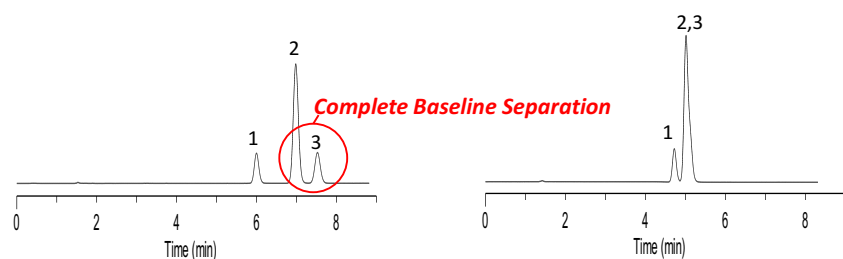
- Silica : 3 Series High Purity Silica Gel
- Particle Size : 3 μm , 5 μm
- Surface Area : 450 m^2/g
- Pore Size : 100 $\text{\AA}$ (10 nm)
- Pore Volume : 1.05 mL/g
- Bonded Phase : Octadecyl Groups
- End-capping : Yes
- Carbon Loading : 23 %
- pH Range : 2~7.5
- USP Code : L1



High-Density Bonding of C18 Phase Delivers Alternative Selectivity to Conventional C18 Columns

A mixture of *o*-, *m*- and *p*-terphenyl were separated under Acetonitrile and Water to compare the performance of planar molecule recognition between Inertsil ODS-HL and conventional C18 column. These three analytes differ only in their three-dimensional structure and not in their hydrophobicity or polarity.

As shown below, Inertsil ODS-HL recognizes even slight steric differences achieving complete baseline separation while other conventional C18 column fails.



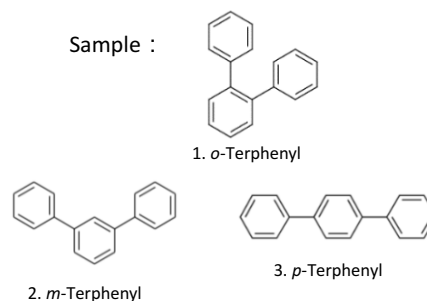
Inertsil ODS-HL
(Carbon Loading 23 %)

InertSustain C18
(Carbon Loading 14 %)

Conditions

Column 5 μ m, 150 $\times$ 4.6 mm I.D.
Eluent A) CH₃CN B) H₂O
A/B = 85/15, v/v
Flow Rate 1.0 mL/min
Col.Temp. 40 $^{\circ}$ C
Detection UV 254 nm

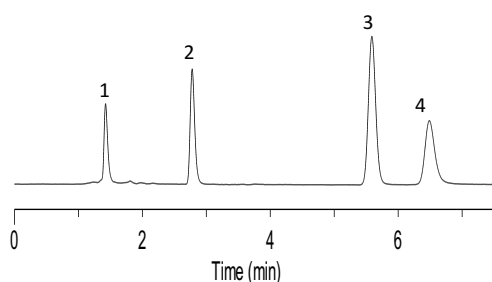
Sample :



Benefits of Highly Inert Packing Material

High-density bonding of C18 phase columns available in the market show severe tailing of peaks due to the presence of silanols in the packing. Inertsil ODS-HL employs a highly inert packing material which provides pure hydrophobic interaction between analytes without generating any secondary interaction delivering sharp peaks.

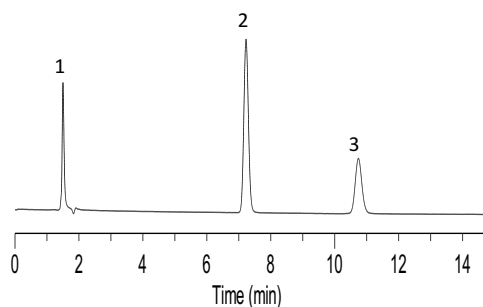
Basic Compound Test



Conditions

Column 5 μ m, 150 $\times$ 4.6 mm I.D.
Eluent A) CH₃CN
B) 25 mM K₂HPO₄ (pH 7.0)
A/B = 30/70, v/v
Flow Rate 1.0 mL/min
Col.Temp. 40 $^{\circ}$ C
Detection UV 230 nm
Sample 1. Uracil
2. Pyridine
3. Phenol
4. Berberine

Acidic Compound Test



Conditions

Column 5 μ m, 150 $\times$ 4.6 mm I.D.
Eluent A) CH₃CN
B) 0.1% H₃PO₄
A/B = 25/75, v/v
Flow Rate 1.0 mL/min
Col.Temp. 40 $^{\circ}$ C
Detection UV 230 nm
Sample 1. Uracil
2. Phenol
3. Salicylic acid

Ordering Information

Preparative Columns

Particle Size	Length (mm)	50	100	150	250
	I.D. (mm)	Cat.No.	Cat.No.	Cat.No.	Cat.No.
5 μ m	6.0	5020-87158	5020-87159	5020-87160	5020-87161
	7.6	5020-87162	5020-87163	5020-87164	5020-87165
	10	5020-87166	5020-87167	5020-87168	5020-87169
	14	5020-87170	5020-87171	5020-87172	5020-87173
	20	5020-87174	5020-87175	5020-87176	5020-87177

* End-fittings are 1/16" NPT compatible.

* Max. Operating Pressure of columns from 6.0 to 50 mm I.D. are 20 MPa (200 Bar).

* For other column dimensions, please inquire.

* Max. Operating Pressure of 100 mm I.D. columns are 10 MPa (100 Bar).

Guard Columns for Preparative Columns

Particle Size	I.D. X Length (mm)	Cat.No.
5 μ m	6.0 X 50	5020-87178
	7.6 X 50	5020-87179
	10 X 50	5020-87180
	14 X 50	5020-87181
	20 X 50	5020-87182



* End-fittings are 1/16" NPT compatible.

* Max. Operating Pressure of columns from 6.0 to 50 mm I.D. are 20 MPa (200 Bar).

* For other column dimensions, please inquire.

* Max. Operating Pressure of 100 mm I.D. columns are 10 MPa (100 Bar).

'GL Sciences' Recommended , W > column Selection Guide

InertSustain C18

- First Choice C18 Column

InertSustain AQ-C18

- Ideal for Maximizing Retention for Highly Polar Compounds in Reversed Phase Methods with Highly Aqueous Mobile Phases

InertSustainSwift C18

- Rapid Elution of Samples in Isocratic Methods and Rapid Column Equilibration Time in Gradient Methods

Inertsil ODS-HL

- Ultra High Retentivity, High-Density Bonding of C18 Phase
- Ideal for Separation of Basic Molecules & its Related Substances, Process Impurities

Ordering Information

Inertsil® ODS-HL Analytical Columns

HP Series Particle Size: 3 µm Max. Operating Pressure: 50 MPa (500 Bar)	Length / I.D. (mm)	2.1	3.0	4.6
	30	5020-87315	5020-87321	5020-87327
	50	5020-87316	5020-87322	5020-87328
	75	5020-87317	5020-87323	5020-87329
	100	5020-87318	5020-87324	5020-87330
	150	5020-87319	5020-87325	5020-87331
	250	5020-87320	5020-87326	5020-87332

* End-fittings are 1/16" taters -compatible.

Particle Size: 3 µm	Length / I.D. (mm)	2.1	3.0	4.0	4.6
	30	5020-87226	5020-87234	5020-87242	5020-87250
	50	5020-87227	5020-87235	5020-87243	5020-87251
	75	5020-87228	5020-87236	5020-87244	5020-87252
	100	5020-87229	5020-87237	5020-87245	5020-87253
	125	5020-87230	5020-87238	5020-87246	5020-87254
	150	5020-87231	5020-87239	5020-87247	5020-87255
Particle Size: 5 µm	Length / I.D. (mm)	2.1	3.0	4.0	4.6
	30	5020-87102	5020-87110	5020-87118	5020-87126
	50	5020-87103	5020-87111	5020-87119	5020-87127
	75	5020-87104	5020-87112	5020-87120	5020-87128
	100	5020-87105	5020-87113	5020-87121	5020-87129
	125	5020-87106	5020-87114	5020-87122	5020-87130
	150	5020-87107	5020-87115	5020-87123	5020-87131
	250	5020-87108	5020-87116	5020-87124	5020-87132

* End-fittings are 1/16" taters -compatible.

* Max. Operating Pressure: 20 MPa (200 Bar)

Cartridge Guard Column E

I.D. of the Analytical Column Applicable (mm)	Length (mm)	I.D. (mm)	Replacement Cartridge E Guard Column		Cartridge E Holder / Cartridge Set	
			(2 EA.)		(2 Cartridge E Guard Columns & 1 Holder)	
			Particle Size		Particle Size	
			3 µm	5 µm	3 µm	5 µm
1.0	10	1.0	5020-87305	5020-87209	5020-87306	5020-87210
1.5,2.1		1.5	5020-87307	5020-87211	5020-87308	5020-87212
2.1,3.0		3.0	5020-87303	5020-87207	5020-87304	5020-87208
4.0,4.6		4.0	5020-87301	5020-87205	5020-87302	5020-87206
2.1,3.0	20	3.0	5020-87311	5020-87215	5020-87312	5020-87216
4.0,4.6		4.0	5020-87309	5020-87213	5020-87310	5020-87214
Holder for Cartridge Guard Column E				For 10 mm Length		5020-08500
				For 20 mm Length		5020-08550

* End-fittings are 1/16" taters-compatible.

* Max. Operating Pressure: 20 MPa (200 Bar)