



High-Speed Separation HPLC Column



Inertsil® ODS-4 2µm

Inertsil ODS-4 columns have proven excellent for analysis of pharmaceutical bases, acids, chelating compounds, and zwitterions. Analysts currently using Inertsil ODS-4 3µm or 5µm in their methods can now achieve ultra high speed UHPLC separations as well.

Column lengths of 30 to 150mm are available to accommodate any range of sample complexity.

BENEFITS:

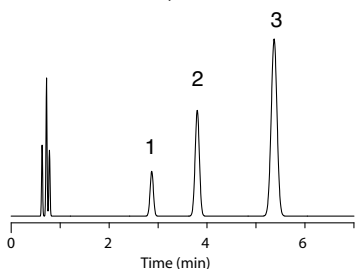
- Maintain high efficiency over a wide range of flow rates.
- Symmetric peaks for basic, acidic and chelating compounds.
- Column lengths up to 150mm operating up to 80MPa (800bar).
- 2 micron shows exact same selectivity as larger particles.

Physical Properties

Silica:	High Purity Spherical Silica Gel
Particle Size:	2µm
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

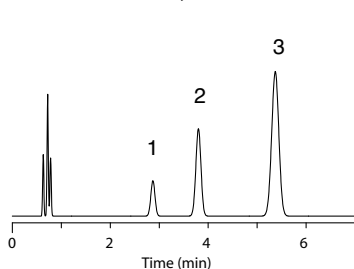
Comparison of Selectivity and Efficiency for Analytical Particle Sizes (50 x 2.1 mm I.D.)

Number of Theoretical Plates
= 8,300



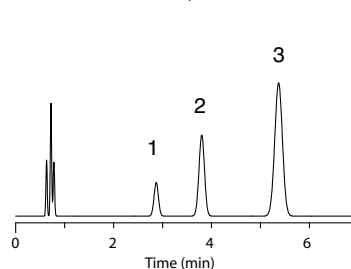
Particle Size: 2µm

Number of Theoretical Plates
= 5,800



Particle Size: 3µm

Number of Theoretical Plates
= 5,100

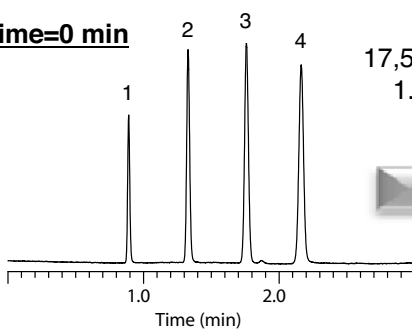


Particle Size: 5µm

Many commercially available 2 micron-class columns show different selectivity than their 3µm and 5µm counterparts. As you can see above, Inertsil ODS-4 delivers absolutely the same selectivity from 2µm through 5µm.

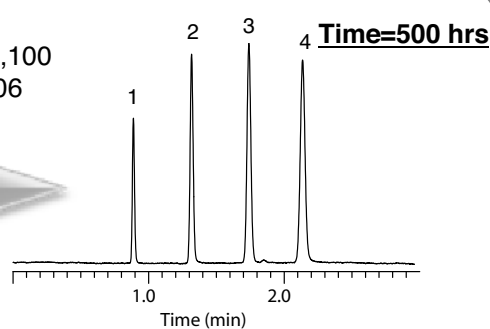
Column Durability at 80MPa (800bar) for 500 hours

Time=0 min



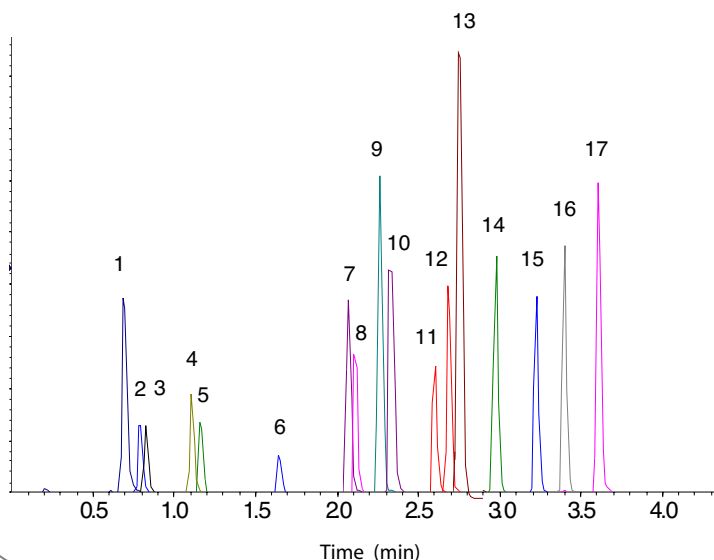
17,500 N 16,100
1.02 Peak Symmetry 1.06
(Peak 4)

80MPa for 500 hours



This durability test illustrates that column efficiency and peak symmetry did not deteriorate significantly even after 500 hours under the operating pressure of 80MPa (800bar).

Analysis of Drugs



Conditions

System : LC800 HPLC system
Column : Inertsil ODS-4 (2µm, 75 x 2.1 mm I.D.)
Eluent : A) CH₃CN
 B) 0.05 % HCOOH in H₂O
Flow Rate : 750 µ L/min
Col. Temp. : 50°C
Detection : LC/MS/MS 4000QTRAP
Injection Vol. : 10 µ L
Sample : As indicated below

- | | |
|---------------------|-------------------------|
| 1. Ranitidine | 10. Doxepin |
| 2. Acetaminophen | 11. Amitriptyline |
| 3. Theophylline | 12. Isopropylantipyrene |
| 4. Scopolamine | 13. Reserpine |
| 5. Caffeine | 14. Ketoprofen |
| 6. Metoprolol | 15. Warfarin |
| 7. Chlorpheniramine | 16. Capsaicin |
| 8. Propranolol | 17. Dihydrocapsaicin |
| 9. Diphenhydramine | each 100 mg/L |

Analytical Column Ordering Guide

Description	Maximum Operating Pressure (MPa)	Length (mm)	I.D. 2.1 mm	I.D. 3.0 mm	I.D. 4.6 mm	PRICE
Inertsil ODS-4, 2µm	80 Mpa (800 bar) (~12,000 psi)	30	IN5020-81200	IN5020-81210		\$733.00
		50	IN5020-81202	IN5020-81212		\$746.00
		75	IN5020-81203	IN5020-81213		\$832.00
		100	IN5020-81204	IN5020-81214		\$905.00
		150	IN5020-81205	IN5020-81215		\$1,032.00
Inertsil ODS-4, 3µm		30	IN5020-04011	IN5020-04021	IN5020-04041	\$453.00
		50	IN5020-04012	IN5020-04022	IN5020-04042	\$453.00
		75	IN5020-04013	IN5020-04023	IN5020-04043	\$497.00
		100	IN5020-04014	IN5020-04024	IN5020-04044	\$516.00
		150	IN5020-04015	IN5020-04025	IN5020-04045	\$561.00
		250	IN5020-04016	IN5020-04026	IN5020-04046	\$622.00
Inertsil ODS-4, 5µm		30	IN5020-03911	IN5020-03921	IN5020-03941	\$395.00
		50	IN5020-03912	IN5020-03922	IN5020-03942	\$395.00
		75	IN5020-03913	IN5020-03923	IN5020-03943	\$437.00
		100	IN5020-03914	IN5020-03924	IN5020-03944	\$457.00
		150	IN5020-03915	IN5020-03925	IN5020-03945	\$486.00
		250	IN5020-03916	IN5020-03926	IN5020-03946	\$530.00

* End-fittings are 1/16" Waters –compatible.

* Other column sizes available upon request

* All brand names and product names are trademarks or registered trademarks of GL Sciences Inc.

Purchase an INERTSIL ODS-4 2µm before March 31st - receive a 15% discount and a free CLS Jacket

Contact us for details!

