

Inertsil™ C8-4 is the latest development of the “-4“-series by GL Sciences. Thanks to the special octyl-bonded phase analysis-times are much shortened compared to C18-bonded stationary phases. **Inertsil™ C8-4** provides the same separation pattern and extreme inertness to any type of compounds just like **Inertsil™ ODS-4**, which delivers symmetric peaks enabling rapid analysis. In addition, it has high stability to 100% aqueous conditions.

Technical Data

Inertsil™ C8-4

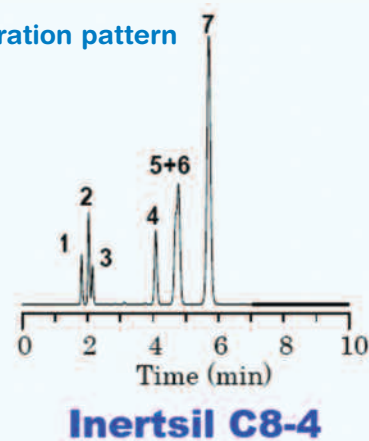
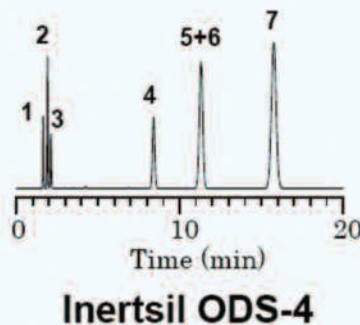
Silica:	High Purity Silica Gel
Particle Shape:	spherical
Particle Size:	5 µm
Surface Area:	450 m ² /g
Pore Size:	100 Å
Pore Volume:	1.05 ml/g
Bonded Phase:	Octyl-groups (C8)
End-capping:	Yes
Carbon-Loading:	5,0 %
USP-Code:	L7

Comparison of retention and separation pattern

System: GL 7400 HPLC system
 Column: 5 µm, 150 x 4.6 mm I.D.
 Flow Rate: 1.0 ml/min
 Eluent: A: CH₃OH
 B: H₂O
 A/B = 80/20
 Temperature: 40 °C
 Detection: UV @ 254 nm

1. Uracil
2. Caffeine
3. Phenol
4. n-Butylbenzene
5. o-Terphenyl
6. n-Amylbenzene
7. Triphenylene

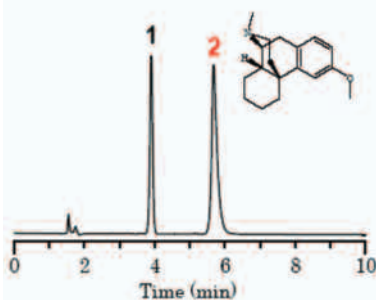
- virtually the same retentivity and separation pattern
- shortening of the analysis time



Adsorption performance on various compounds

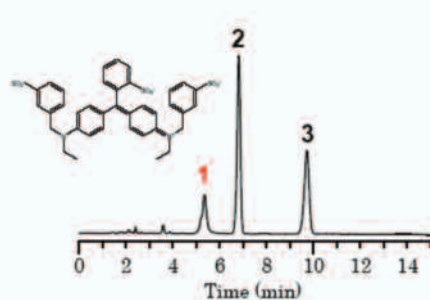
Basic compound (Dextromethorphan)

Column: Inertsil™ C8-4 5 µm, 150 x 4.6 mm I.D.
 Flow Rate: 1.0 ml/min
 Eluent: A: CH₃CN
 B: 25 mM Phosphate buffer; pH = 7.0
 A/B = 40/60
 Temperature: 40 °C
 Detection: UV @ 220 nm
 Sample: 1.0 µl (0.1 mg/ml)
 1. Phenol
 2. Dextromethorphan hydrobromide



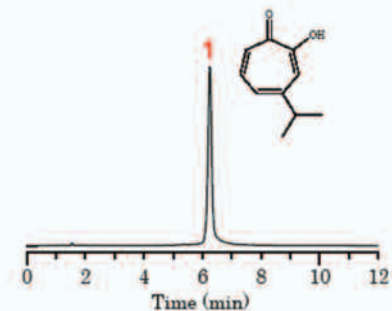
Acid compound (Brilliant Blue FCF)

Column: Inertsil™ C8-4 5 µm, 150 x 4.6 mm I.D.
 Flow Rate: 1.0 ml/min
 Eluent: A: CH₃CN
 B: 0.1 % H₃PO₄
 A/B = 25/75
 Temperature: 40 °C
 Detection: UV @ 254 nm
 Sample: 3.0 µl
 1. Brilliant Blue FCF (0.05 mg/ml)
 2. Phenol (0.3 mg/ml)
 3. Salicylic acid (0.2 mg/ml)



Chelating compound (Hinokitiol)

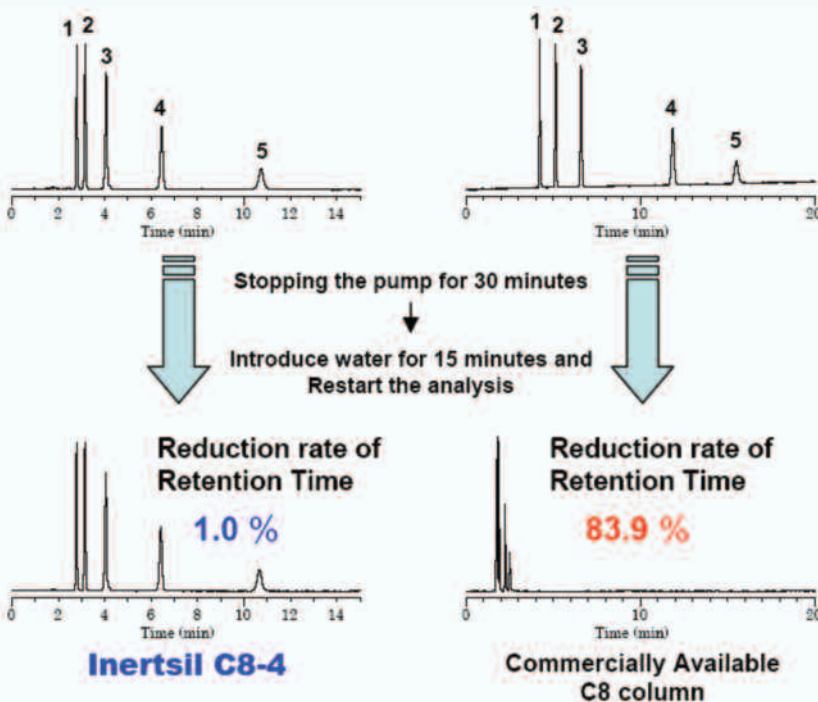
Column: Inertsil™ C8-4 5 µm, 150 x 4.6 mm I.D.
 Flow Rate: 1.0 ml/min
 Eluent: A: CH₃CN
 B: 0.1 % H₃PO₄
 A/B = 40/60
 Temperature: 40 °C
 Detection: UV @ 254 nm
 Sample: 1.0 µl (0.1 ml/ml)
 1. β-Thujaplicin (Hinokitiol)



Confirming stability to 100% aqueous conditions

As **Inertsil™ C8-4** was designed to minimize the dewetting phenomenon, it provides superb stability and reproducibility even to those critical water rich mobile phase conditions. As a result, rapid analysis can be achieved in a gradient mode as well as the equilibration time of the column is short.

System: GL 7400 HPLC system
 Column: 5 µm, 50 x 4.6 mm I.D.
 Flow Rate: 1.0 ml/min
 Eluent: 100 % H₂O
 Temperature: 40 °C
 Detection: UV @ 254 nm
 Sample: 1. Cytosine
 2. Uracil
 3. Guanine
 4. Thymine
 5. Adenine



Available Column Dimensions & Pricing

Particle Size	I.D. (mm)	1		1.5		1.0 - 1.5		2.1		3		4		4.6		2.1 - 4.6	
		Length (mm)	Cat.No.	Cat.No.	List Price	Cat.No.	Cat.No.	Cat.No.	Cat.No.	Cat.No.	Cat.No.	Cat.No.	Cat.No.	Cat.No.	List Price		
5 µm	30	5020-81221	5020-81231	444.--	5020-04051	5020-04061	5020-04071	5020-04081	265.--								
	50	5020-81222	5020-81232	444.--	5020-04052	5020-04062	5020-04072	5020-04082	265.--								
	75	5020-81223	5020-81233	451.--	5020-04053	5020-04063	5020-04073	5020-04083	276.--								
	100	5020-81224	5020-81234	458.--	5020-04054	5020-04064	5020-04074	5020-04084	276.--								
	150	5020-81225	5020-81235	472.--	5020-04055	5020-04065	5020-04075	5020-04085	307.--								
	250	5020-81226	5020-81236	486.--	5020-04056	5020-04066	5020-04076	5020-04086	339.--								

Particle Size	I.D. (mm)	6		7.6		10		20	
		Length (mm)	Cat.No.	List Price	Cat.No.	List Price	Cat.No.	List Price	Cat.No.
5 µm	Guard 50	5020-04091	377.--	5020-04096	448.--	5020-81247	942.--	5020-81257	1.496.--
	50	5020-04087	377.--	5020-04092	448.--	5020-81243	942.--	5020-81253	1.496.--
	100	5020-04088	401.--	5020-04093	inquire	5020-81244	inquire	5020-81254	inquire
	150	5020-04089	424.--	5020-04094	inquire	5020-81245	inquire	5020-81255	inquire
	250	5020-04090	460.--	5020-04095	648.--	5020-81246	1.296.--	5020-81256	2.355.--