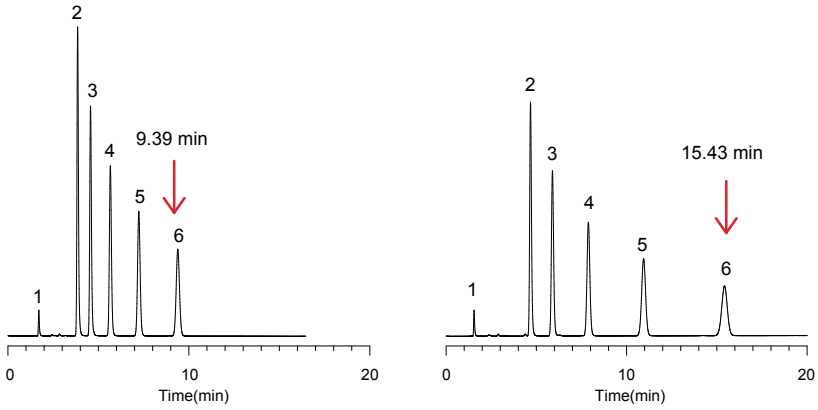
InertSustain® C8

Physical Properties

- **Silica** : **Newly Developed ES Silica Gel**
- **Particle Size** : **3 µm, 5 µm**
- **Surface Area** : **350 m^2/g**
- **Pore Size** : **100 Å (10 nm)**
- **Pore Volume** : **0.85 mL/g**
- **Bonded Phase** : **Octyl Groups**
- **End-capping** : **Complete**
- **Carbon Loading** : **8 %**
- **USP Code** : **L7**
- **pH Range** : **1 ~ 10**

IInertSustain C8 is an octyl group (C8) bonded column delivering the same extreme inertness to any type of compounds just like InertSustain C18, which enables rapid analysis of highly hydrophobic compounds delivering symmetric peaks at a wide range of pH.

Figure 1 : Comparison of Retentivity between InertSustain® C18 and InertSustain® C8

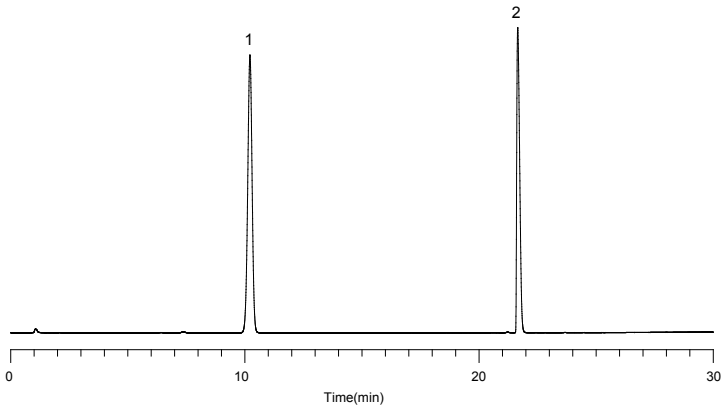


Conditions

Column Size : 5 µm, 150 × 4.6 mm I.D.
Eluent : A)CH_3OH
B)H_2O
A/B = 80/20, v/v
Flow Rate : 1.0 mL/min
Col. Temp. : 40 °C
Detection : UV 254 nm

Sample : 1. Uracil
2. Toluene
3. Ethylbenzene
4. Propylbenzene
5. *n*-Butylbenzene
6. *n*-Amylbenzene

Figure 2 : Analysis of Losartan Potassium and Hydrochlorothiazide Tablets, Assay Test (Based on the Condition of United States Pharmacopeia 36-NF31)



Conditions

Column : InertSustainC8(5 µm,150 × 4.0 mm I.D.)
Eluent : A)CH_3CN/Buffer* = 7/93,v/v(Premix)
B)CH_3CN
A/B=100/0 – 12min – 92/8 – 16min – 38/62 – 2min – 100/0 – 5min – 100/0,v/v
Flow Rate : 1.0mL/min
Col.Temp. : 35 °C
Detection : UV280 nm(GL-7450 UV Detector)
InjectionVol. : 20 µL
Sample : 1. Hydrochlorothiazide 0.1 mg/mL
2. Losartan Potassium 0.4 mg/mL
Tailing factor of 2 : 1.79 (< 2.5)

* Buffer : 1.25 g/L of monobasic potassium phosphate and 1.5 g/L of dibasic sodium phosphate n water.

Analytical Columns

	Length \ I.D. (mm)	2.1	3.0	
Particle Size: 2 µm	30	5020-16235	5020-16240	
	50	5020-16236	5020-16241	
	75	5020-16237	5020-16242	
	100	5020-16238	5020-16243	
	150	5020-16239	5020-16244	
	Length \ I.D. (mm)	2.1	3.0	4.6
HPSeries Particle Size: 3 µm 50 MPa (500 Bar)	30	5020-16217	5020-16223	5020-16229
	50	5020-16218	5020-16224	5020-16230
	75	5020-16219	5020-16225	5020-16231
	100	5020-16220	5020-16226	5020-16232
	150	5020-16221	5020-16227	5020-16233
	250	5020-16222	5020-16228	5020-16234

* End-fittings are 1/16" Waters-compatible.
* UHPLC compatible end-fittings are also available upon request for UHPLC systems (Ex: UPLC) to avoid dead volume.
* Indicate "UP Type end-fittings" when ordering. (Please note that UP type is not available for a 4.6 mm I.D. column)
* For maximum operating pressure information, please refer to page 46.

	Length \ I.D. (mm)	1.0	1.5		
Particle Size: 3 µm	30	5020-16168	5020-16174		
	50	5020-16169	5020-16175		
	75	5020-16170	5020-16176		
	100	5020-16171	5020-16177		
	150	5020-16172	5020-16178		
	250	5020-16173	5020-16179		
	Length \ I.D. (mm)	2.1	3.0	4.0	4.6
	30	5020-16132	5020-16139	5020-16146	5020-16153
	50	5020-16133	5020-16140	5020-16147	5020-16154
	75	5020-16134	5020-16141	5020-16148	5020-16155
	100	5020-16135	5020-16142	5020-16149	5020-16156
	125	5020-16855	5020-16856	5020-16857	5020-16858
	150	5020-16136	5020-16143	5020-16150	5020-16157
	250	5020-16137	5020-16144	5020-16151	5020-16158
Particle Size: 5 µm	Length \ I.D. (mm)	1.0	1.5		
	30	5020-16039	5020-16045		
	50	5020-16040	5020-16046		
	75	5020-16041	5020-16047		
	100	5020-16042	5020-16048		
	150	5020-16043	5020-16049		
	250	5020-16044	5020-16050		
	Length \ I.D. (mm)	2.1	3.0	4.0	4.6
	30	5020-16002	5020-16009	5020-16016	5020-16023
	50	5020-16003	5020-16010	5020-16017	5020-16024
	75	5020-16004	5020-16011	5020-16018	5020-16025
	100	5020-16005	5020-16012	5020-16019	5020-16026
	125	5020-16851	5020-16852	5020-16853	5020-16854
	150	5020-16006	5020-16013	5020-16020	5020-16027
	250	5020-16007	5020-16014	5020-16021	5020-16028

* End-fittings are 1/16" Waters-compatible.
* For maximum operating pressure information, please refer to page 46.

Cartridge Guard Column E

I.D. of the Analytical Column Applicable (mm)	Length (mm)	I.D. (mm)	Replacement Cartridge E Guard Column (2 EA.)		Cartridge E Holder / Cartridge Set (2 Cartridge E Guard Columns & 1 Holder)	
			Particle Size		Particle Size	
			3 µm	5 µm	3 µm	5 µm
1.0	10	1.0	5020-16207	5020-16106	5020-16208	5020-16107
1.5, 2.1		1.5	5020-16209	5020-16108	5020-16210	5020-16109
2.1, 3.0		3.0	5020-16205	5020-16104	5020-16206	5020-16105
4.0, 4.6		4.0	5020-16203	5020-16102	5020-16204	5020-16103
2.1, 3.0	20	3.0	5020-16213	5020-16112	5020-16214	5020-16113
4.0, 4.6		4.0	5020-16211	5020-16110	5020-16212	5020-16111
Holder for Cartridge Guard Column E				For 10 mm Length		5020-08500
				For 20 mm Length		5020-08550

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