

Inertsil® CN-3

Physical Properties

- Silica : 3 Series High Purity Silica Gel
- Particle Size : 3µm, 5 µm
- Surface Area : 450 m²/g
- Pore Size : 100 Å (10 nm)
- Pore Volume : 1.05 mL/g
- Bonded Phase : Cyanopropyl Groups
- End-capping : None
- Carbon Loading : 14 %
- USP Code : L10
- pH Range : 2 ~ 7.5



Inertsil CN-3 is a cyanopropyl bonded phase that provides pi-pi interactions offered by the triple bond in cyano groups. Due to its chemistry, separation can be achieved for those compounds that could not be separated on a straight-chain-alkyl columns such as C8 or C18 bonded phases (Figure. 1). Figure 2 illustrates the relative retention of each compound to n-Propylbenzene. Although Inertsil ODS-EP and Inertsil Ph-3 has the ability to recognize the electron-state, each column delivers different elution pattern.

Inertsil CN-3 column can be used for both reversed phase and normal phase separations. The column is originally shipped in a mixture of n-hexane/ethanol. When using the column for reversed phase applications, fully equilibrate the column before use.

Figure 1 : Comparison of Recognition of Electronic-State with Inertsil® ODS-3

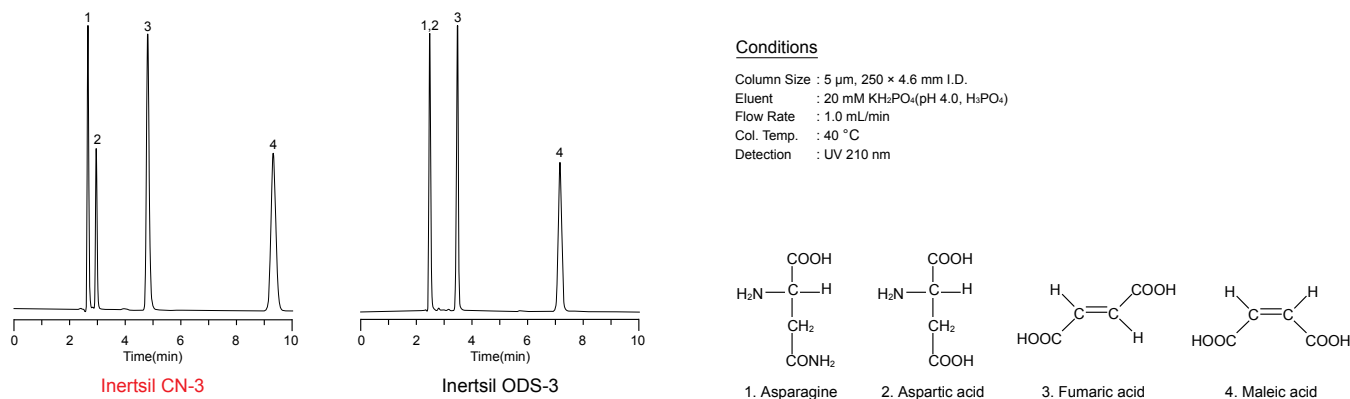
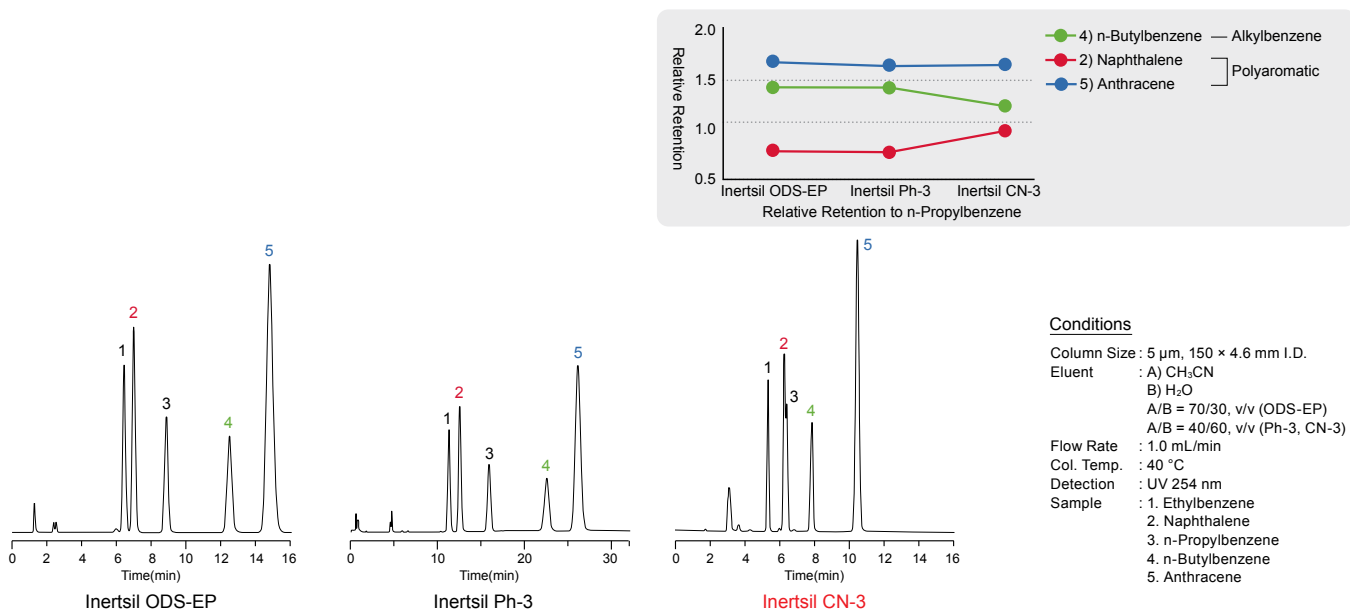


Figure 2 : Comparison of Recognition of Electronic-State between various Inertsil® columns



Analytical Columns

Particle Size: 3 µm	Length \ I.D. (mm)	1.0	1.5		
	33	5020-85331	5020-85341		
	50	5020-85332	5020-85342		
	75	5020-85333	5020-85343		
	100	5020-85334	5020-85344		
	150	5020-85335	5020-85345		
	250	5020-85336	5020-85346		
	Length \ I.D. (mm)	2.1	3.0	4.0	4.6
	33	5020-05261	5020-05271	5020-05281	5020-05291
	50	5020-05262	5020-05272	5020-05282	5020-05292
	75	5020-05263	5020-05273	5020-05283	5020-05293
	100	5020-05264	5020-05274	5020-05284	5020-05294
	150	5020-05265	5020-05275	5020-05285	5020-05295
	250	5020-05266	5020-05276	5020-05286	5020-05296
	Particle Size: 5 µm	Length \ I.D. (mm)	1.0	1.5	
33		5020-85311	5020-85321		
50		5020-85312	5020-85322		
75		5020-85313	5020-85323		
100		5020-85314	5020-85324		
150		5020-13712	5020-13710		
250		5020-85316	5020-85326		
Length \ I.D. (mm)		2.1	3.0	4.0	4.6
33		5020-05311	5020-05321	5020-05331	5020-05341
50		5020-05312	5020-05322	5020-05332	5020-05342
75		5020-05313	5020-05323	5020-05333	5020-05343
100		5020-05314	5020-05324	5020-05334	5020-05344
150		5020-05315	5020-05325	5020-01942	5020-01940
250		5020-05316	5020-05326	5020-01943	5020-01941

* 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	5020-19219	5020-19218	5020-19269	5020-19268
1.5, 2.1		1.5	5020-19319	5020-19318	5020-19369	5020-19368
2.1, 3.0		3.0	5020-19119	5020-19118	5020-19169	5020-19168
4.0, 4.6		4.0	5020-19019	5020-19018	5020-19069	5020-19068
2.1, 3.0		20	3.0	5020-19519	5020-19518	5020-19569
4.0, 4.6	4.0		5020-19419	5020-19418	5020-19469	5020-19468
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.

* For maximum operating pressure information, please refer to page 46.

Reversed Phase Columns

HILIC Columns

Normal Phase Columns

SEC Columns

Ion Exchange Columns

Application Specific Columns

Guard Columns

Preparative Columns

Capillary Columns

Applications

Cat. No. Index