

Guaranteed Replacement to Hypersil®

- Highly reproducible
- Long column life
- Mimics performance of Thermo® Hypersil-Keystone Hypersil®
- Economically priced

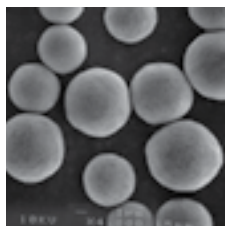
Phenomenex HyperClone columns have been developed to provide chromatographic behavior that mimics that of Thermo Hypersil columns. For comparative applications, please contact your local Phenomenex representative.

Comparisons of physical and chemical characteristics of HyperClone and Hypersil are listed below. As you can see, HyperClone and Hypersil compare very well for important specifications such as particle size, pore size and carbon load.

If HyperClone™ analytical columns do not provide at least an equivalent separation compared to Hypersil® columns of the same phase, particle size and dimensions, return the column with comparative data within 45 days for a FULL REFUND.

HyperClone

SEM of Base Silica



VS.

Material Characteristics

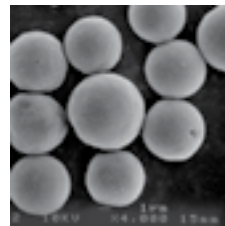
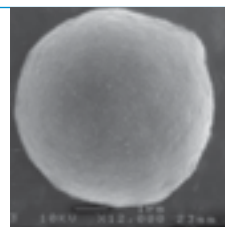
HyperClone (BDS silica)		Hypersil (BDS silica)†
3, 5	Particle Size (µm)	3, 5
130	Pore Size (Å)	130
155	Surface Area (m²/g)	170
0.6	Pore Volume (mL/g)	0.6

HyperClone (regular silica)		Hypersil† (regular silica)†
3, 5	Particle Size (µm)	3, 5
120	Pore Size (Å)	120
155	Surface Area (m²/g)	170
0.6	Pore Volume (mL/g)	0.6

HyperClone		Hypersil†
Carbon Load		
7 %	BDS C8	7 %
11 %	BDS C18	11 %
6.5 %	MOS (C8)	6.5 %
10 %	ODS (C18)	10 %
4 %	CN (CPS)	4 %

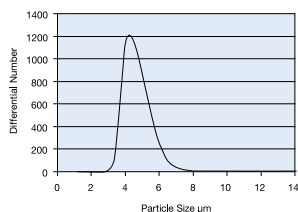
Hypersil

SEM of Base Silica



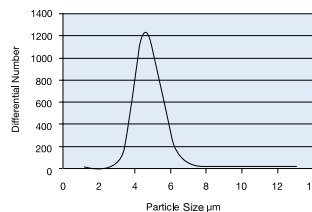
Particle Size Distribution†

HyperClone



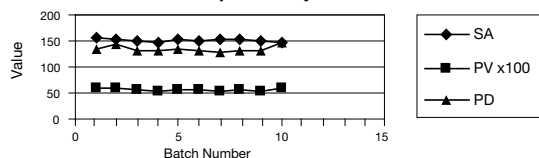
VS.

Hypersil

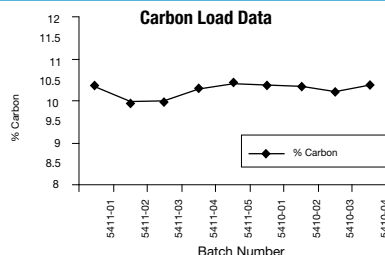


HyperClone Reproducibility

Silica Reproducibility



Carbon Load Data



† All Hypersil information obtained from (then) Thermo Electron Corporation 2006-2007 catalog and 2012-2013 Thermo Scientific Chromatography Columns catalog.

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HyperClone™

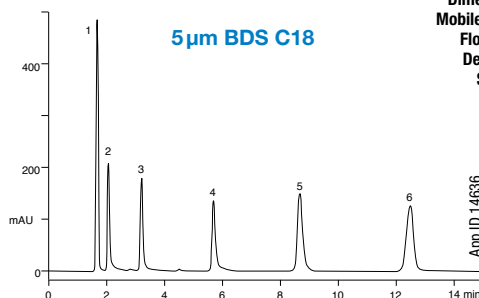
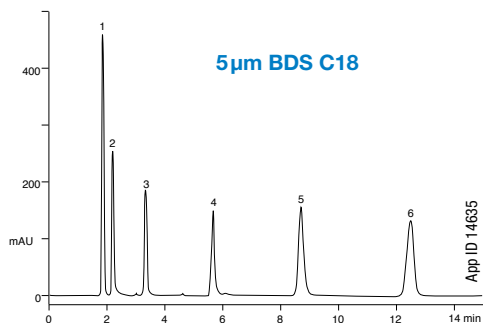
VS.

Hypersil®

Non-Polar Basic Compounds

Conditions for Both Columns

Dimensions: 150 x 4.6 mm
Mobile Phase: Methanol/50 mM KH₂PO₄, pH 3.5 (60:40)
Flow Rate: 1.0 mL/min
Detection: UV @ 254 nm
Sample:
 1. Uracil
 2. Pyridine
 3. Methylaniline
 4. Dimethylaniline
 5. Dichloronitroaniline
 6. Toluene



Ordering Information

3 µm Minibore and Analytical Columns (mm)							SecurityGuard™ Cartridges (mm)	
Phases	50 x 2.0	150 x 2.0	150 x 3.2	100 x 4.6	125 x 4.0	150 x 4.6	4 x 2.0*	4 x 3.0*
	—						/10pk	/10pk
ODS (C18)	—	00F-4356-B0	00F-4356-R0	00D-4356-E0	00E-4356-D0	00F-4356-E0	AJO-4286	AJO-4287
CN (CPS)	—	—	—	00D-4421-E0	—	00F-4421-E0	AJO-4304	AJO-4305
							/10pk	/10pk
BDS C8	00B-4417-B0	00F-4417-B0	—	—	—	00F-4417-E0	AJO-4289	AJO-4290
BDS C18	—	00F-4419-B0	00F-4419-R0	00D-4419-E0	00E-4419-D0	00F-4419-E0	AJO-4286	AJO-4287
							for ID: 2.0-3.0 mm	3.2-8.0 mm

5 µm Minibore and Analytical Columns (mm)									SecurityGuard™ Cartridges (mm)	
Phases	150 x 2.0	150 x 3.2	250 x 3.2	125 x 4.0	250 x 4.0	100 x 4.6	150 x 4.6	250 x 4.6	4 x 2.0*	4 x 3.0*
									/10pk	/10pk
Silica	—	—	—	—	—	—	00F-4358-E0	00G-4358-E0	AJ0-4347	AJ0-4348
MOS (C8)	—	—	—	00E-4359-D0	—	—	00F-4359-E0	00G-4359-E0	AJ0-4289	AJ0-4290
ODS (C18)	00F-4361-B0	00F-4361-R0	00G-4361-R0	00E-4361-D0	00G-4361-D0	00D-4361-E0	00F-4361-E0	00G-4361-E0	AJ0-4286	AJ0-4287
CN (CPS)	—	—	—	—	—	—	00F-4422-E0	00G-4422-E0	AJ0-4304	AJ0-4305
									/10pk	/10pk
BDS C8	—	—	—	—	—	—	00F-4418-E0	00G-4418-E0	AJ0-4289	AJ0-4290
BDS C18	00F-4420-B0	00F-4420-R0	—	00E-4420-D0	00G-4420-D0	00D-4420-E0	00F-4420-E0	00G-4420-E0	AJ0-4286	AJ0-4287
									for ID: 2.0-3.0 mm	3.2-8.0 mm

5 µm SemiPrep and Preparative Columns (mm)		SecurityGuard™ Cartridges (mm)	
Phases	250 x 10	10 x 10 †	
		/3pk	
ODS (C18)	00G-4361-N0	AJ0-7221	
for ID: 9-16 mm			

*SecurityGuard™ Analytical Cartridges require holder, Part No.: KJ0-4282
 †SemiPrep SecurityGuard™ Cartridges require holder, Part No.: AJ0-7220



Other dimensions available upon request.



For SecurityGuard Cartridge Holders and Cartridges. see p. 254.

HyperClone™ is a trademark of Phenomenex.

Hypersil® is a registered trademark of Thermo Hypersil-Keystone.

Phenomenex is not associated with Thermo Scientific, Thermo Fisher Scientific or Thermo Hypersil-Keystone.

Comparative chromatograms may not be representative of all applications.