



Guaranteed Replacement to HYPERSIL®

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

If HyperClone™ analytical columns do not provide at least an equivalent separation compared to HYPERSIL® columns of the same phase, particle size and dimensions, send in your comparative data within 45 days and keep the HyperClone column for FREE.

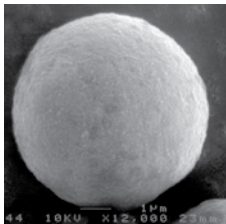
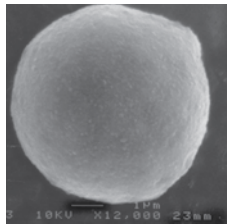
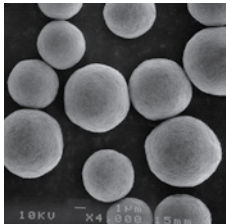
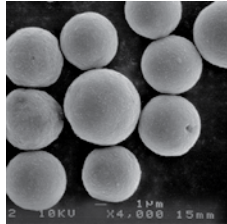
Phenomenex HyperClone columns have been developed to provide chromatographic behavior that mimics that of Thermo HYPERSIL columns. For comparative applications, please contact your local Phenomenex representative.

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.

HyperClone™

VS.

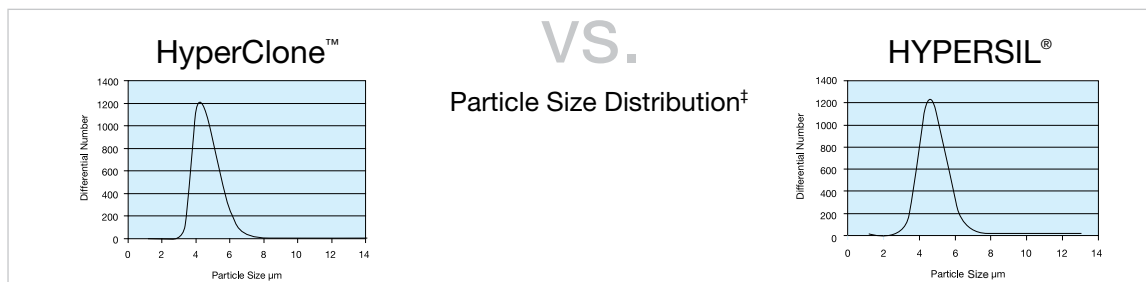
HYPERSIL®

SEM of Base Silica		Material Characteristics		SEM of Base Silica	
		Parameter			
		HyperClone™ (BDS silica)		HYPERSIL® (BDS silica)†	
		3, 5	Particle Size (µm)	3, 5	
		130	Pore Size (Å)	130	
		155	Surface Area (m ² /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 (m ² /g)	170	
		0.6	Pore Volume (mL/g)	0.6	
		Carbon Load % Comparison			
		7	BDS C8	7	
		11	BDS C18	11	
		6.5	MOS (C8)	6.5	
		10	ODS (C18)	10	
		4	CN (CPS)	4	

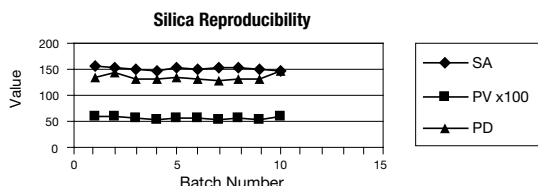
HyperClone™

VS.

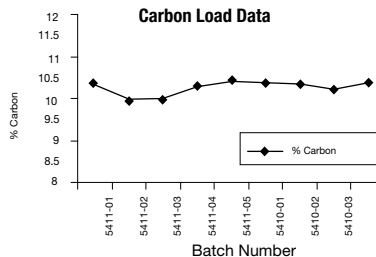
HYPERSIL®



HyperClone™ Reproducibility



Carbon Load Data



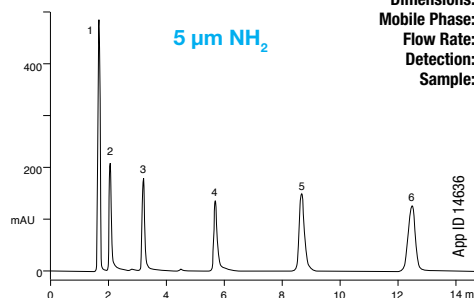
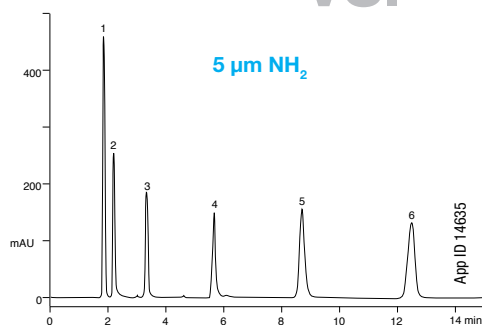
† All Hypersil information obtained from (then) Thermo Electron Corporation 2006-2007 catalog.

If HyperClone™ analytical columns do not provide at least an equivalent separation compared to HYPERSIL® columns of the same phase, particle size and dimensions, send in your comparative data within 45 days and keep the HyperClone column for FREE.

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*
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
BDS C8	00B-4417-B0	00F-4417-B0	—	00D-4417-E0	—	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*
Silica	—	—	—	—	—	—	00F-4358-E0	00G-4358-E0	AJO-4347	AJO-4348
MOS (C8)	—	—	—	00E-4359-D0	—	—	00F-4359-E0	00G-4359-E0	AJO-4289	AJO-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	AJO-4286	AJO-4287
CN (CPS)	—	—	—	—	—	—	00F-4422-E0	00G-4422-E0	AJO-4304	AJO-4305
PAH	—	—	—	—	—	00D-4427-E0	—	00G-4427-E0	—	—
BDS C8	—	—	—	—	—	—	00F-4418-E0	00G-4418-E0	AJO-4289	AJO-4290
BDS C18	00F-4420-B0	00F-4420-R0	—	00E-4420-D0	00G-4420-D0	00D-4420-E0	00F-4420-E0	00G-4420-E0	AJO-4286	AJO-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	250 x 21.2	10 x 10 †	15 x 21.2**
ODS (C18)	00G-4361-N0	00G-4361-P0	AJO-7221	AJO-7839
BDS C18	00G-4420-N0	—	AJO-7221	AJO-7839
			for ID: 9-16 mm 18-29 mm	

*SecurityGuard™ Analytical Cartridges require holder, Part No.: KJO-4282
 †SemiPrep SecurityGuard™ Cartridges require holder, Part No.: AJO-7220
 **PREP SecurityGuard™ Cartridges require holder, Part No.: AJO-8223



Other dimensions available upon request.



For SecurityGuard Cartridge Holders and Cartridges. see p. 244.

HyperClone™ is a trademark of Phenomenex, Inc.
 HYPERSIL® is a registered trademark of Thermo Hypersil-Keystone.
 Phenomenex is not associated with Thermo Fisher Scientific or Thermo Hypersil-Keystone.

Comparative chromatograms may not be representative of all applications.