

ACE UltraCore Method Development Kits

- Contains ACE UltraCore SuperC18 and SuperPhenylHexyl phases
- Use to exploit selectivity changes at low, intermediate and high pH
- Available from microbore (0.5 mm id) through to analytical (4.6 mm id) dimensions (see p.14)
- Ultra inert core-shell particles and Encapsulated Bonding Technology (EBT™) provide excellent peak shape

Phase	Functional Group	Particle Size (µm)	Pore Size (Å)	Surface Area (m ² /g)	Carbon Load (%)	Maximum pH Range	USP Listing
ACE UltraCore 2.5 SuperC18	Octadecyl encapsulated	2.5	95	130	7.0	1.5-11.0 ^a	L1
ACE UltraCore 2.5 SuperPhenylHexyl	Phenyl-Hexyl encapsulated	2.5	95	130	4.6	1.5-11.0 ^a	L11
ACE UltraCore 5 SuperC18	Octadecyl encapsulated	5	95	100	5.4	1.5-11.0 ^a	L1
ACE UltraCore 5 SuperPhenylHexyl	Phenyl-Hexyl encapsulated	5	95	100	3.6	1.5-11.0 ^a	L11

^aACE UltraCore columns are designed for use with LC/MS compatible buffers. Further information is contained within "ACE UltraCore – A Guide to Buffer Selection" - please contact your distributor to request your FREE copy or visit www.ace-hplc.com.

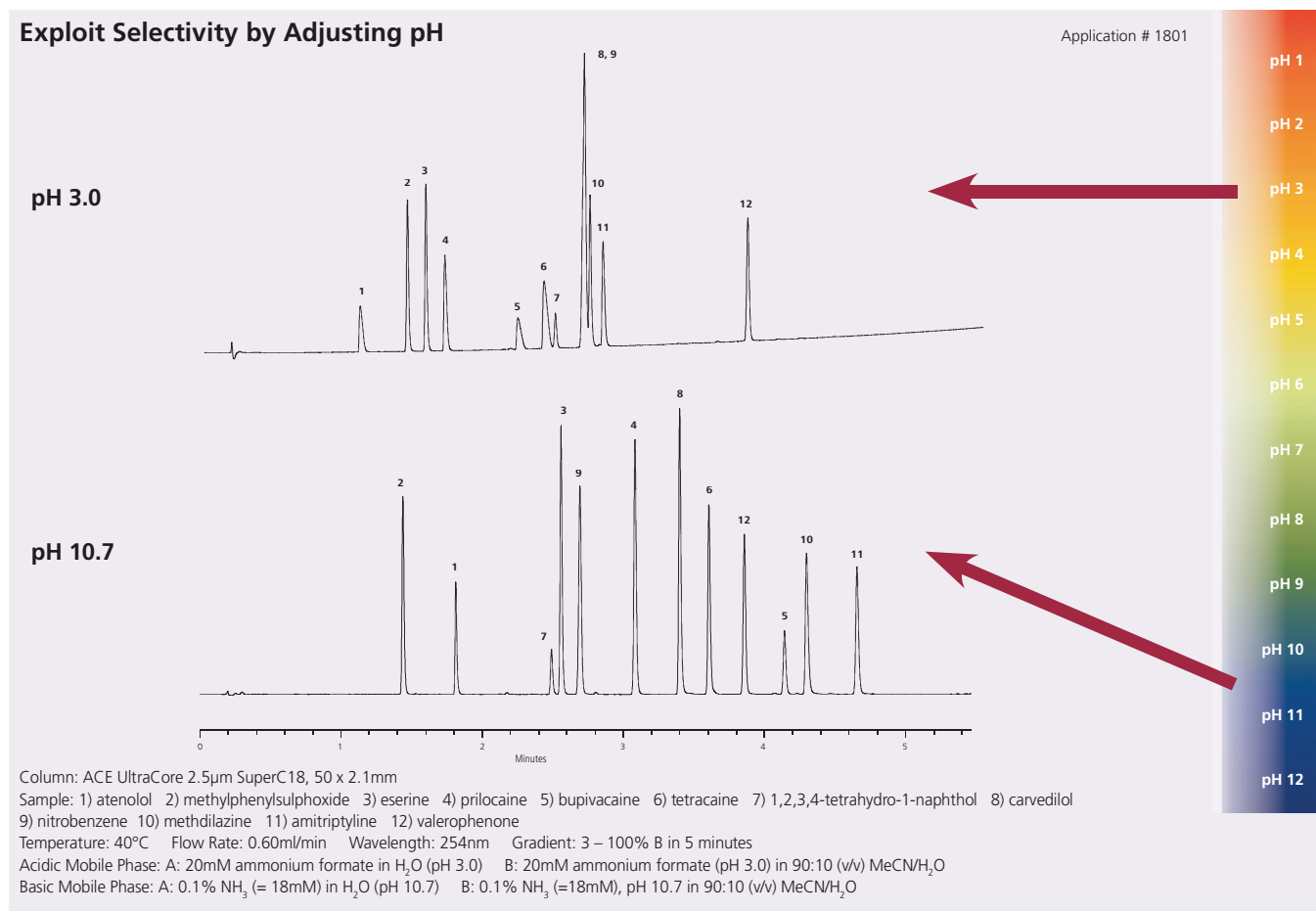
ACE UltraCore - Columns Provide Improved Peak Shape

- ACE UltraCore SuperC18 and SuperPhenylHexyl phases are manufactured using our unique Encapsulated Bonding Technology (EBT™)
- This technology dramatically increases ligand coverage of the silica surface and effectively eliminates the negative effects of unbonded silanol groups
- The higher ligand coverage results in improved inertness, chromatographic performance and stability



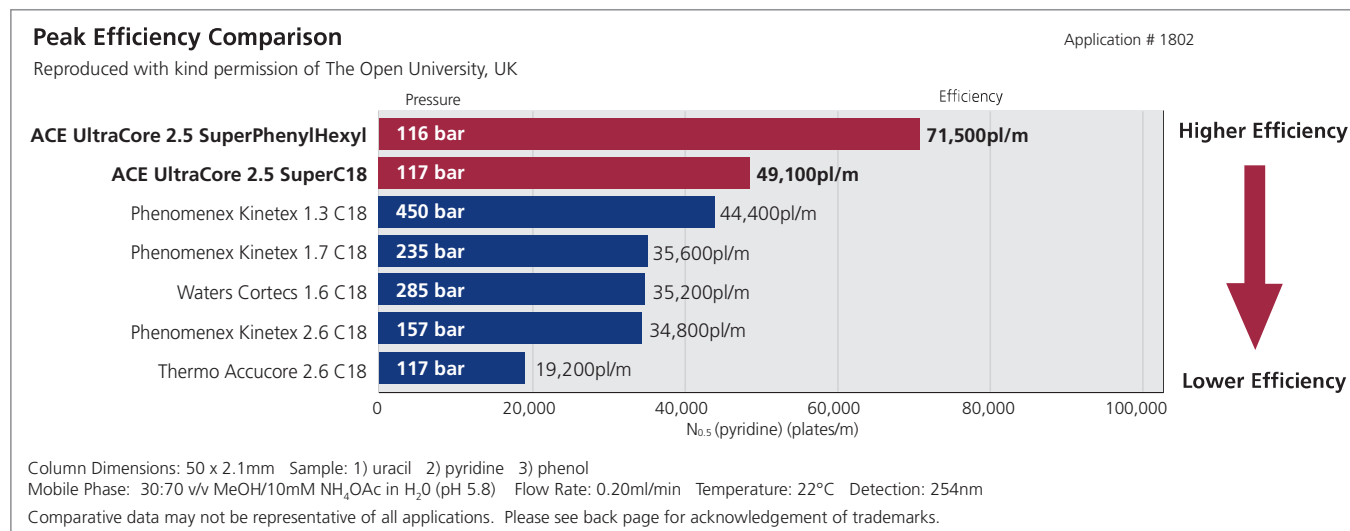
ACE® UltraCore
Stationary Phases
Virtually Eliminate the
Negative Effects of
Silanols on UHPLC &
HPLC Separations

Use ACE UltraCore to Investigate pH Effects

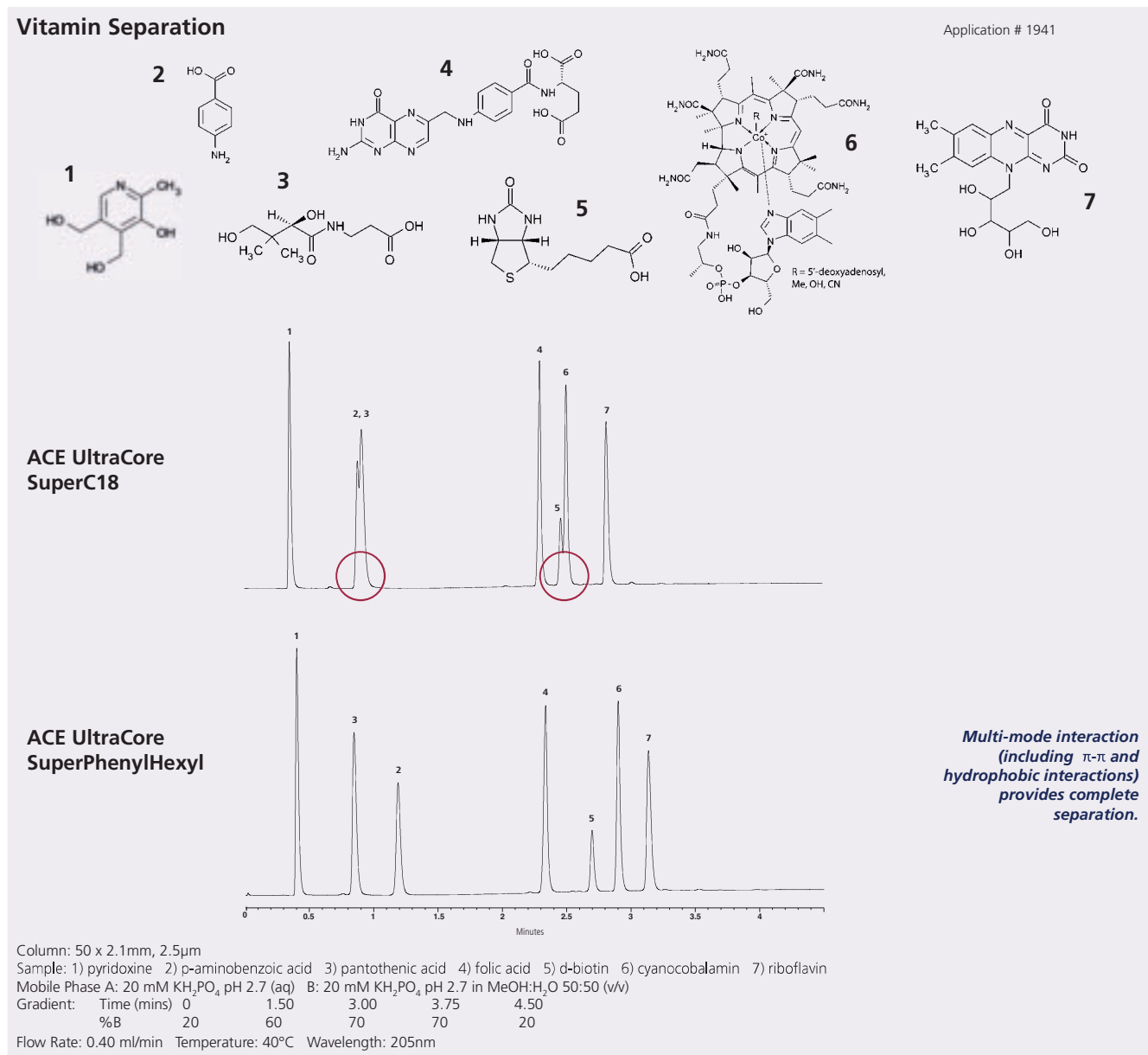


ACE UltraCore Columns are Highly Inert

- Solid-core columns from leading manufacturers investigated
- Comparison of column efficiency for pyridine – a basic molecule



Introducing Selectivity Changes Using ACE UltraCore Method Development Kits



ACE UltraCore Method Development UHPLC/HPLC Column Kits

(Contains 2 columns: ACE UltraCore SuperC18 and ACE UltraCore SuperPhenylHexyl of specified dimensions)

(UHPLC/HPLC hardware format with 1000bar/15000psi pressure limit)		
Column Dimensions	2.5µm	5µm
	2.1 x 20mm	MDKU-25-0202U
2.1 x 30mm	MDKU-25-0302U	MDKU-5-0302U
2.1 x 35mm	MDKU-25-3502U	MDKU-5-3502U
2.1 x 50mm	MDKU-25-0502U	MDKU-5-0502U
2.1 x 75mm	MDKU-25-7502U	MDKU-5-7502U
2.1 x 100mm	MDKU-25-1002U	MDKU-5-1002U
2.1 x 125mm	MDKU-25-1202U	MDKU-5-1202U
2.1 x 150mm	MDKU-25-1502U	MDKU-5-1502U
2.1 x 250mm	-	MDKU-5-2502U
3.0 x 20mm	MDKU-25-0203U	MDKU-5-0203U
3.0 x 30mm	MDKU-25-0303U	MDKU-5-0303U
3.0 x 35mm	MDKU-25-3503U	MDKU-5-3503U
3.0 x 50mm	MDKU-25-0503U	MDKU-5-0503U
3.0 x 75mm	MDKU-25-7503U	MDKU-5-7503U
3.0 x 100mm	MDKU-25-1003U	MDKU-5-1003U
3.0 x 125mm	MDKU-25-1203U	MDKU-5-1203U
3.0 x 150mm	MDKU-25-1503U	MDKU-5-1503U
3.0 x 250mm	-	MDKU-5-2503U
4.6 x 20mm	MDKU-25-0246U	MDKU-5-0246U
4.6 x 30mm	MDKU-25-0346U	MDKU-5-0346U
4.6 x 35mm	MDKU-25-3546U	MDKU-5-3546U
4.6 x 50mm	MDKU-25-0546U	MDKU-5-0546U
4.6 x 75mm	MDKU-25-7546U	MDKU-5-7546U
4.6 x 100mm	MDKU-25-1046U	MDKU-5-1046U
4.6 x 125mm	MDKU-25-1246U	MDKU-5-1246U
4.6 x 150mm	MDKU-25-1546U	MDKU-5-1546U
4.6 x 250mm	-	MDKU-5-2546U



ACE UltraCore Method Development Microbore HPLC Column Kits

(Contains 2 columns: ACE UltraCore SuperC18 and ACE UltraCore SuperPhenylHexyl of specified dimensions)

(HPLC hardware format with 400bar/6000psi recommended pressure limit)				
Column Dimensions	2.5µm		5µm	
	1/16" port	1/32" port	1/16" port	1/32" port
0.5 x 30mm	MDKU-25-03005	MDKU-25-03005S	MDKU-5-03005	MDKU-5-03005S
0.5 x 50mm	MDKU-25-05005	MDKU-25-05005S	MDKU-5-05005	MDKU-5-05005S
0.5 x 75mm	MDKU-25-75005	MDKU-25-75005S	MDKU-5-75005	MDKU-5-75005S
0.5 x 100mm	MDKU-25-10005	MDKU-25-10005S	MDKU-5-10005	MDKU-5-10005S
0.5 x 125mm	MDKU-25-12005	MDKU-25-12005S	MDKU-5-12005	MDKU-5-12005S
0.5 x 150mm	MDKU-25-15005	MDKU-25-15005S	MDKU-5-15005	MDKU-5-15005S
0.5 x 250mm	-	-	MDKU-5-25005	MDKU-5-25005S
1.0 x 30mm	MDKU-25-0301	MDKU-25-0301S	MDKU-5-0301	MDKU-5-0301S
1.0 x 50mm	MDKU-25-0501	MDKU-25-0501S	MDKU-5-0501	MDKU-5-0501S
1.0 x 75mm	MDKU-25-7501	MDKU-25-7501S	MDKU-5-7501	MDKU-5-7501S
1.0 x 100mm	MDKU-25-1001	MDKU-25-1001S	MDKU-5-1001	MDKU-5-1001S
1.0 x 125mm	MDKU-25-1201	MDKU-25-1201S	MDKU-5-1201	MDKU-5-1201S
1.0 x 150mm	MDKU-25-1501	MDKU-25-1501S	MDKU-5-1501	MDKU-5-1501S
1.0 x 250mm	-	-	MDKU-5-2501	MDKU-5-2501S

IMPORTANT NOTE: ACE microbore columns (1.0mm id and 0.5mm id) are available with either standard 1/16" (10-32 thread) connections or 1/32" (6-40 thread) connections. For use with Eksigent micro and nano LC systems, order columns with 1/32" connections and use either ACE 6-40 fittings (part number ACE-MC3210, 10 pack) or Eksigent 6-40 fittings (part number 5019621).

For 1/16" HPLC column connections up to 6000psi, PEEK™ 1/16" fingertight fittings (part number ACE-CC10, 10 pack) are recommended. For 1/32" microbore HPLC column connections up to 6000psi, PEEK™ 1/32" (6-40 thread) fingertight fittings (part number ACE-MC3210, 10 pack) are recommended. For 1/16" UHPLC column connections up to 25000psi, re-useable 1/16" fittings (part number EXL-CC10, 10 pack) are recommended. To further extend UHPLC and HPLC column lifetimes, ACE pre-column filters are recommended. For further details please contact your distributor or visit www.ace-hplc.com