

PHENOSPHERE™

- Cost-effective, HPLC columns
- "NEXT" generation features more rugged C18, C8, CN and Phenyl phases for the same low price. See p. 201

Material Characteristics

Packing Material	Particle Shape/Size (µm)	Pore Size (Å)	Pore Volume (mL/g)	Surface Area (m ² /g)	Carbon Load %	Calculated Bonded Phase Coverage (µmole/m ²)	End Capping
Silica	Spher. 3, 5, 10	80	0.5	220	0	0	No
C1	Spher. 3, 5, 10	80	0.5	220	4, Monomeric	1.08	No
C6	Spher. 3, 5, 10	80	0.5	220	6, Monomeric	2.27	Yes
C8	Spher. 3, 5, 10	80	0.5	220	6, Monomeric	3.54	Yes
ODS (1)	Spher. 3, 5, 10	80	0.5	220	7, Monomeric	1.74	Partial
ODS (2)	Spher. 3, 5, 10	80	0.5	220	11, Monomeric	2.50	Yes
CN (1)	Spher. 3, 5	80	0.5	220	4, Monomeric	2.82	Partial
NH ₂	Spher. 3, 5, 10	80	0.5	220	2, Monomeric	1.58	No
Phenyl	Spher. 3, 5	80	0.5	220	3.5, Monomeric	1.10	Partial
SCX	Spher. 5, 10	80	0.5	220	6, Monomeric	0.4meq/g	No
SAX	Spher. 5, 10	80	0.5	220	4, Monomeric	0.6meq/g	No

ORDERING INFORMATION

SecurityGuard™ Analytical Cartridges require universal holder Part No.: KJO-4282

Phases	3 µm Columns (mm)				SecurityGuard™ Cartridges	
	150 x 2.0	150 x 3.2	50 x 4.6	150 x 4.6	4 x 2.0 mm* /10pk	4 x 3.0 mm* /10pk
ODS (1)	00F-3222-B0	00F-3222-R0	—	00F-3222-E0	AJO-4286	AJO-4287
ODS (2)	—	00F-3169-R0	00B-3169-E0	00F-3169-E0	AJO-4286	AJO-4287
CN (1)	—	00F-3170-R0	00B-3170-E0	00F-3170-E0	AJO-4304	AJO-4305
Phenyl	—	00F-3171-R0	—	—	AJO-4350	AJO-4351
NH ₂	—	—	00B-4084-E0	00F-4084-E0	AJO-4301	AJO-4302

for ID: 2.0-3.0 mm 3.2-8.0 mm

Phases	5 µm Columns (mm)						SecurityGuard™ Cartridges		
	150 x 2.0	250 x 2.0	150 x 3.2	250 x 3.2	125 x 4.0	150 x 4.6	250 x 4.6	4 x 2.0 mm* /10pk	4 x 3.0 mm* /10pk
Silica	—	—	—	—	00E-3188-D0	00F-3188-E0	00G-3188-E0	AJO-4347	AJO-4348
C1	—	—	—	—	—	00F-4085-E0	00G-4085-E0	AJO-4298	AJO-4299
C6	—	—	—	—	—	00F-4086-E0	00G-4086-E0	—	—
C8	—	—	—	—	—	00F-3149-E0	00G-3149-E0	AJO-4289	AJO-4290
ODS (1)	—	—	—	—	—	—	00G-3148-E0	AJO-4286	AJO-4287
ODS (2)	00F-3172-B0	—	00F-3172-R0	00G-3172-R0	—	00F-3172-E0	00G-3172-E0	AJO-4286	AJO-4287
CN (1)	—	—	—	—	00E-3174-D0	00F-3174-E0	00G-3174-E0	AJO-4304	AJO-4305
Phenyl	—	—	—	00G-3175-R0	—	—	00G-3175-E0	AJO-4350	AJO-4351
NH ₂	—	00G-4087-B0	—	00G-4087-R0	—	00F-4087-E0	00G-4087-E0	AJO-4301	AJO-4302
SAX	00F-3151-B0	00G-3151-B0	00F-3151-R0	00G-3151-R0	—	00F-3151-E0	00G-3151-E0	AJO-4310	AJO-4311
SCX	—	—	—	—	00E-3223-D0	00F-3223-E0	00G-3223-E0	AJO-4307	AJO-4308

for ID: 2.0-3.0 mm 3.2-8.0 mm

Phases	10 µm Columns (mm)				SecurityGuard™ Cartridges	
	250 x 4.6	250 x 10.0	4 x 3.0 mm* /10pk	10 x 10 mm† /3pk		
C8	00G-3179-E0	—	AJO-4290	AJO-7222		
ODS (1)	00G-3180-E0	—	AJO-4287	AJO-7221		
ODS (2)	00G-3181-E0	00G-3181-N0	AJO-4287	AJO-7221		
NH ₂	00G-4096-E0	00G-4096-N0	AJO-4302	AJO-7364		
SCX	00G-3225-E0	00G-3225-N0	AJO-4308	AJO-7369		

for ID: 3.2-8.0 mm 9-16 mm

*SecurityGuard™ Analytical Cartridges require holder, Part No.: KJO-4282
 †Semi-prep SecurityGuard™ Cartridges require holder, Part No.: AJO-7220



See p. 219 for SecurityGuard Cartridge Holders and Cartridges.

PHENOSPHERE™ - NEXT™

- NEXT generation of PhenoSphere columns
- Features a more rugged silica
- Available in a wide array of particle sizes, phases and dimensions
- An excellent alternative to IB-Sil, Selectosil and PrimeSphere columns

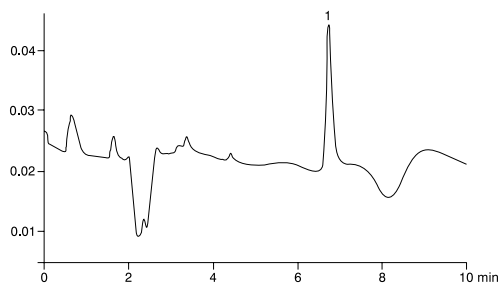
Material Characteristics

Packing Material	Particle Shape/Size (µm)	Pore Size (Å)	Surface Area (m ² /g)	Carbon Load %	End Capping
Silica	Spher. 3, 5	120	380	—	No
C8	Spher. 3, 5	120	380	10	Yes
C18	Spher. 3, 5	120	380	14	Yes
CN	Spher. 3, 5	120	380	8	Yes
Phenyl	Spher. 5	120	380	11	Yes

App ID 10763

Dehydroacetic Acid

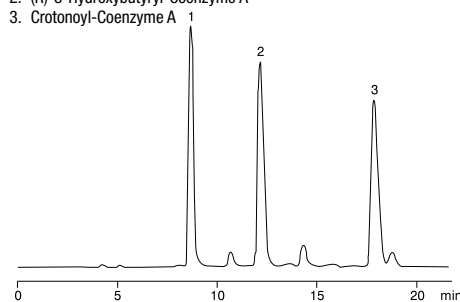
Column: PhenoSphere-NEXT 3 µm C18
Dimensions: 150 x 4.6 mm
Part No.: 00F-4303-E0
Mobile Phase: Acetonitrile/0.1 % Acetic Acid (75:25)
Flow Rate: 1 mL/min
Detection: UV @ 200 nm
Temperature: 23-25 °C
Injection Volume: 20 µL
Sample: 1. Dehydroacetic Acid (DHA) from tap water



App ID 10764

Coenzyme A

Column: PhenoSphere-NEXT 5 µm C18
Dimensions: 250 x 4.6 mm
Part No.: 00G-4308-E0
Mobile Phase: A: Methanol/10 mM Potassium phosphate, pH 6.5 (0:100)
 B: Methanol/10 mM Potassium phosphate, pH 6.5 (40:60)
 30 % to 80 % B in 10 min and hold at 80 % for 5 min
Flow Rate: 0.8 mL/min
Detection: UV @ 260 nm
Temperature: 25 °C
Injection Volume: 10 µL
Sample: 1. Coenzyme A
 2. (R)-3-Hydroxybutyryl-Coenzyme A
 3. Crotonoyl-Coenzyme A



ORDERING INFORMATION

SecurityGuard™ Analytical Cartridges require universal holder Part No.: KJO-4282

Phases	3 µm Columns (mm)					SecurityGuard™ Cartridges	
	150 x 1.0	50 x 2.0	150 x 2.0	50 x 4.6	150 x 4.6	4 x 2.0 mm /10pk	4 x 3.0 mm /10pk
C8	—	00B-4302-B0	—	00B-4302-E0	—	AJO-4289	AJO-4290
C18	00F-4303-A0	00B-4303-B0	00F-4303-B0	00B-4303-E0	00F-4303-E0	AJO-4286	AJO-4287
CN	—	00B-4305-B0	—	—	00F-4305-E0	AJO-4304	AJO-4305
						for ID: 2.0-3.0 mm	3.2-8.0 mm

Phases	5 µm Columns (mm)						SecurityGuard™ Cartridges		
	150 x 2.0	250 x 2.0	150 x 3.2	250 x 3.2	125 x 4.0	150 x 4.6	250 x 4.6	4 x 2.0 mm /10pk	4 x 3.0 mm /10pk
Silica	—	00G-4306-B0	—	—	—	00F-4306-E0	00G-4306-E0	AJO-4347	AJO-4348
C8	00F-4307-B0	00G-4307-B0	—	—	00E-4307-D0	00F-4307-E0	00G-4307-E0	AJO-4289	AJO-4290
C18	00F-4308-B0	00G-4308-B0	00F-4308-R0	00G-4308-R0	00E-4308-D0	00F-4308-E0	00G-4308-E0	AJO-4286	AJO-4287
CN	—	00G-4310-B0	—	—	—	00F-4310-E0	00G-4310-E0	AJO-4304	AJO-4305
Phenyl	00F-4309-B0	—	00F-4309-R0	—	—	00F-4309-E0	00G-4309-E0	AJO-4350	AJO-4351
								for ID: 2.0-3.0 mm	3.2-8.0 mm

Phases	3 µm LC/MS Columns (mm)					
	150 x 1.0	30 x 2.0	50 x 2.0	150 x 2.0	30 x 4.6	50 x 4.6
C8	—	00A-4302-B0	00B-4302-B0	—	00A-4302-E0	00B-4302-E0
C18	00F-4303-A0	—	00B-4303-B0	00F-4303-B0	00A-4303-E0	00B-4303-E0
CN	—	—	—	—	00A-4305-E0	—

Phases	5 µm LC/MS Columns (mm)						
	50 x 1.0	150 x 1.0	30 x 2.0	50 x 2.0	150 x 2.0	30 x 4.6	50 x 4.6
Silica	—	—	—	—	—	00A-4306-E0	—
C8	—	—	00A-4307-B0	—	00F-4307-B0	—	00B-4307-E0
C18	00B-4308-A0	00F-4308-A0	00A-4308-B0	00B-4308-B0	00F-4308-B0	—	00B-4308-E0
Phenyl	—	—	—	00B-4309-B0	00F-4309-B0	—	00B-4309-E0
CN	—	—	—	—	—	00A-4310-E0	00B-4310-E0