

Chromegabond WR LC Columns

Chromegabond WR is a highly base deactivated phase that is produced via a two-step process. The first step involves bonding monomerically C18, C8, C4, Phenyl, Cyano or Biphenyl ligands to an ultra-high purity synthetically produced spherical silica. The second step utilizes a proprietary multiple endcapping bonding process that produces highly base deactivated columns. This state-of-the-art bonding procedure uses mixtures of short chain alkyl silanes to react with residual silanol groups.

Chromegabond WR is particularly useful for amines and acids and can provide alternative selectivity to the Epic line of LC columns. In comparison with Epic, Chromegabond WR uses a different silica with a lower surface area. In many cases, different silica can provide differences in retention and selectivity.

Features and Benefits

- Highly base deactivated using proprietary endcapping technology to provide an exceptionally inert phase for the analysis of both acids and bases
- Range of stationary phase chemistries to enhance method development
- Preparative dimensions available to allow flexibility and full scalability



Material Characteristics

Brand	Phase*	Particle Size (µm)	Pore Size (Å)	Carbon %	End Cap	pH Range	USP Code
Chromegabond WR	C18	1.8, 3, 5, 7, 10	120	16	Yes	2-8	L1
Chromegabond WR	C8	3, 5, 10	120	9	Yes	2-8	L7
Chromegabond WR	C4	3, 5, 10	120	5	Yes	2-8	L26
Chromegabond WR	Cyano	3, 5, 10	120	—	Yes	2-8	L10
Chromegabond WR	Phenyl	3, 5, 10	120	—	Yes	2-8	L11
Chromegabond WR	Biphenyl	3, 5, 10	120	—	Yes	2-8	L11

Preparative columns are also available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

Chromegabond WR C18

Chromegabond WR-C18 is highly base deactivated phase that is produced via a multi-step process. The first step involves bonding C18 groups to an ultra-high purity synthetically produced spherical silica. The next steps utilize a proprietary multiple endcapping bonding process that produces highly base deactivated columns. This state-of-the-art bonding procedure uses mixtures of short chain alkyl silanes to react with residual silanol groups. Chromegabond WR-C18, as a result of our special bonding treatment, is highly hydrophobic and exceptionally inert for the analysis of both acids and bases. It is useful for the separation of molecules that contain polar groups along with hydrophobic groups.

In comparison with Epic C18, Chromegabond WR-C18 uses a different silica with a lower surface area. In many cases, different silica can provide differences in retention and selectivity. WR-C18 is the second C18 column of choice after Epic C18 and can be useful for a wider range of samples. WR-C18 is particularly useful for amines and acids.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond WR C18	50	2.1	1.8	512A91-WR-C18
Chromegabond WR C18	50	2.1	3	112191-WR-C18
Chromegabond WR C18	50	2.1	5	112291-WR-C18
Chromegabond WR C18	50	3.0	3	113191-WR-C18
Chromegabond WR C18	50	3.0	5	113291-WR-C18
Chromegabond WR C18	50	4.6	10	115391-WR-C18
Chromegabond WR C18	50	4.6	3	115191-WR-C18
Chromegabond WR C18	50	4.6	5	115291-WR-C18
Chromegabond WR C18	100	2.1	3	122191-WR-C18
Chromegabond WR C18	100	2.1	5	122291-WR-C18
Chromegabond WR C18	100	3.0	3	123191-WR-C18
Chromegabond WR C18	100	4.0	3	124191-WR-C18
Chromegabond WR C18	100	4.0	5	124291-WR-C18
Chromegabond WR C18	100	4.6	10	125391-WR-C18
Chromegabond WR C18	100	4.6	3	125191-WR-C18
Chromegabond WR C18	100	4.6	5	125291-WR-C18
Chromegabond WR C18	120	4.6	5	1D5291-WR-C18
Chromegabond WR C18	125	3.0	5	103291-WR-C18

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond WR C18	12	4.0	5	104291-WR-C18
Chromegabond WR C18	125	4.0	7	104491-WR-C18
Chromegabond WR C18	125	4.6	3	105191-WR-C18
Chromegabond WR C18	125	4.6	5	105291-WR-C18
Chromegabond WR C18	125	4.6	7	105491-WR-C18
Chromegabond WR C18	150	2.1	3	132191-WR-C18
Chromegabond WR C18	150	2.1	5	132291-WR-C18
Chromegabond WR C18	150	3.9	10	13e391-WR-C18
Chromegabond WR C18	150	3.9	5	13e291-WR-C18
Chromegabond WR C18	150	4.0	5	134291-WR-C18
Chromegabond WR C18	150	4.6	10	135391-WR-C18
Chromegabond WR C18	150	4.6	3	135191-WR-C18
Chromegabond WR C18	150	4.6	5	135291-WR-C18
Chromegabond WR C18	200	4.0	7	144491-WR-C18
Chromegabond WR C18	250	3.0	5	153291-WR-C18
Chromegabond WR C18	250	4.0	5	154291-WR-C18
Chromegabond WR C18	250	4.6	10	155391-WR-C18
Chromegabond WR C18	250	4.6	3	155191-WR-C18
Chromegabond WR C18	250	4.6	5	155291-WR-C18
Chromegabond WR C18	300	3.9	10	16e391-WR-C18
Chromegabond WR C18	300	3.9	5	16e291-WR-C18
Chromegabond WR C18	300	4.0	10	164391-WR-C18
Chromegabond WR C18	300	4.0	5	164291-WR-C18
Chromegabond WR C18	300	4.6	10	165391-WR-C18
Chromegabond WR C18	300	4.6	5	165291-WR-C18
Chromegabond WR C18	300	4.6	7	164491-WR-C18
Chromegabond WR C18 Prep	150	30	10	13N391-WR-C18
Chromegabond WR C18 Prep	150	50	5	13F291-WR-C18
Chromegabond WR C18 Prep	250	10	10	157391-WR-C18
Chromegabond WR C18 Prep	250	10	5	157291-WR-C18
Chromegabond WR C18 Prep	250	20	10	158391-WR-C18
Chromegabond WR C18 Prep	250	20	5	158291-WR-C18
Chromegabond WR C18 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-WR-C18
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	500100

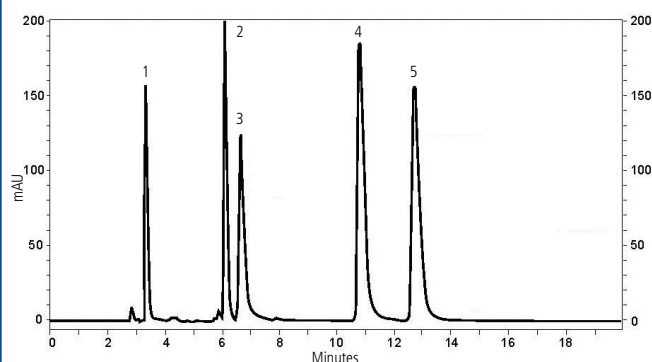
Other column dimensions and guard cartridges are available.
Please enquire for more details at LCA.TechSupport@perkinelmer.com

HPLC analysis of a tricyclic antidepressants using Chromegabond WR C18, 250 x 4.6 mm, 5 µm

Peak Identification

1. Norephedrine	47 µg/mL
2. Toluene	133 µg/mL
3. Nortriptyline	20 µg/mL
4. Imipramine	60 µg/mL
5. Amitriptyline	42 µg/mL

Mobile phase: 80% methanol
20% KH_2PO_4 , 25 mM
pH = 6.8
Flow rate: 1.0 mL/min
Detection: UV @ 215 nm
Injection vol: 5 µL

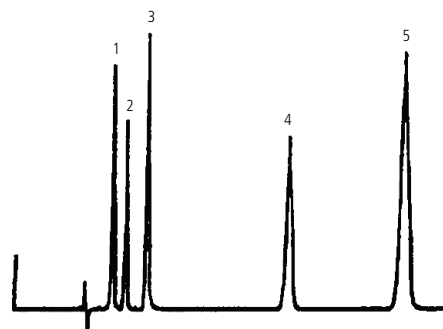


HPLC analysis of drug related molecules using Chromegabond WR C18, 250 x 4.6 mm, 5 µm.

Peak Identification

1. Acetylsalicylic acid
2. p-Acetophenetide
3. Salicylic acid
4. Phenylbutazone
5. Indomethacin

Mobile phase: 70% Methanol
30% 4 mM KH_2PO_4
pH = 3
Flow rate: 1.0 mL/min
Detection: UV @ 254 nm

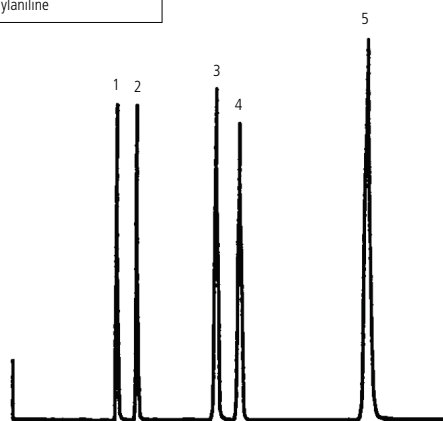


HPLC analysis of anilines and neutrals using Chromegabond WR C18, 250 x 4.6 mm, 5 µm.

Peak Identification

1. Aniline
2. Dimethyl Phthalate
3. Dimethylaniline
4. Toluene
5. Diethylaniline

Mobile phase: 65% Acetonitrile
35% Water
Flow rate: 1.0 mL/min
Detection: UV @ 254 nm

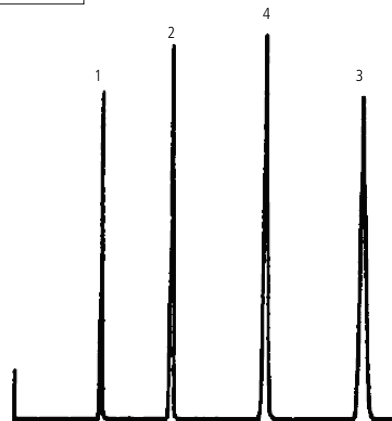


HPLC analysis of a substituted anilines and phenol using Chromegabond WR C18, 250 x 4.6 mm, 5 µm.

Peak Identification

1. Phenol
2. Dimethylaniline
3. Diethylaniline
4. Di-N-Butyl Phthalate

Mobile phase: 70% Acetonitrile
30% Water
Flow rate: 1.0 mL/min
Detection: UV @ 254 nm



Chromegabond WR C8

Chromegabond WR-C8 is highly base deactivated phase that is produced via a multi-step process. The first step involves bonding C8 groups to an ultra-high purity synthetically produced spherical silica. The next steps utilize a proprietary multiple endcapping bonding process that produces highly base deactivated columns. The C8 phase is less hydrophobic than the C18 phase and is, therefore, useful for separations which require less retention. It can be particularly useful for more hydrophobic compounds, both charged and neutral (e.g. lipids and steroids).

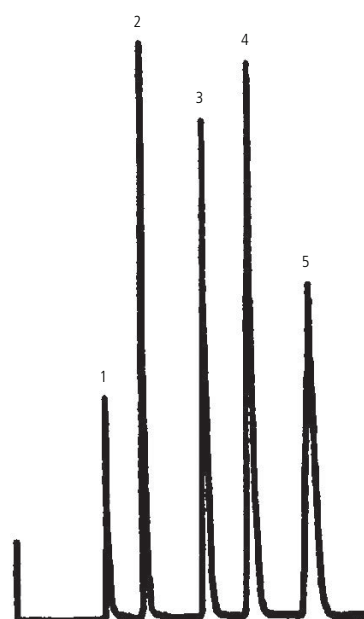
Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond WR C8	50	2.1	3	112191-WR-C8
Chromegabond WR C8	50	2.1	5	112291-WR-C8
Chromegabond WR C8	50	4.6	3	115191-WR-C8
Chromegabond WR C8	100	2.1	3	122191-WR-C8
Chromegabond WR C8	100	2.1	5	122291-WR-C8
Chromegabond WR C8	100	4.6	3	125191-WR-C8
Chromegabond WR C8	100	4.6	5	125291-WR-C8
Chromegabond WR C8	125	4.6	5	105291-WR-C8
Chromegabond WR C8	150	2.1	3	132191-WR-C8
Chromegabond WR C8	150	2.1	5	132291-WR-C8
Chromegabond WR C8	150	3.0	3	133191-WR-C8
Chromegabond WR C8	150	4.0	5	134291-WR-C8
Chromegabond WR C8	150	4.6	10	135391-WR-C8
Chromegabond WR C8	150	4.6	3	135191-WR-C8
Chromegabond WR C8	150	4.6	5	135291-WR-C8
Chromegabond WR C8	250	3.0	5	183291-WR-C8
Chromegabond WR C8	250	4.0	10	154391-WR-C8
Chromegabond WR C8	250	4.0	5	154291-WR-C8
Chromegabond WR C8	250	4.6	5	155291-WR-C8
Chromegabond WR C8 Prep	250	10	5	157291-WR-C8
Chromegabond WR C8 Prep	250	20	5	158291-WR-C8
Chromegabond WR C8 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-WR-C8
Chromegabond WR C8 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-WR-C8
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	500100

Other column dimensions and guard cartridges are available.
Please enquire for more details at LCA.TechSupport@perkinelmer.com

HPLC analysis of a basic drug mixture using Chromegabond WR C8, 250 x 4.6 mm, 5 µm

Peak Identification
1. Unretained peak
2. Chlorpheniramine
3. Procainamide
4. Amiloride
5. N-acetylprocainamide

Mobile phase: 10% Acetonitrile
90% 50 mM KH₂PO₄
Flow rate: 1.0 mL/min
Detection: UV @ 254 nm



Chromegabond WR C4

Chromegabond WR-C4 is highly base deactivated phase that is produced via a multi-step process. The first step involves bonding C4 groups to an ultra-high purity synthetically produced spherical silica. The next steps utilize a proprietary multiple endcapping bonding process that produces highly base deactivated columns. Chromegabond WR C4 is the least hydrophobic of the alkyl phases (C18 and C8) and is useful for lipophilic molecules and applications which require less retention.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond WR C4	50	2.1	3	112191-WR-C4
Chromegabond WR C4	50	2.1	5	112291-WR-C4
Chromegabond WR C4	50	4.6	3	115191-WR-C4
Chromegabond WR C4	100	2.1	3	122191-WR-C4
Chromegabond WR C4	100	2.1	5	122291-WR-C4
Chromegabond WR C4	100	4.6	3	125191-WR-C4
Chromegabond WR C4	100	4.6	5	125291-WR-C4
Chromegabond WR C4	150	2.1	3	132191-WR-C4
Chromegabond WR C4	150	2.1	5	132291-WR-C4
Chromegabond WR C4	150	4.6	3	135191-WR-C4
Chromegabond WR C4	150	4.6	5	135291-WR-C4
Chromegabond WR C4	250	4.6	5	155291-WR-C4
Chromegabond WR C4	300	4.0	5	164291-WR-C4
Chromegabond WR C4	300	4.6	5	165291-WR-C4
Chromegabond WR C4 Prep	150	50	5	13F291-WR-C4
Chromegabond WR C4 Prep	250	10	5	157291-WR-C4
Chromegabond WR C4 Prep	250	20	5	158291-WR-C4
Chromegabond WR C4 Prep	250	30	5	15N291-WR-C4
Chromegabond WR C4 Prep	50	20	5	118291-WR-C4
Chromegabond WR C4 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-WR-C4
Chromegabond WR C4 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-WR-C4
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	500100

Other column dimensions and guard cartridges are available.
Please enquire for more details at LCA.TechSupport@perkinelmer.com

Chromegabond WR Cyano

Chromegabond WR Cyano is highly base deactivated phase that is produced via a multi-step process. The first step involves bonding cyano groups to an ultra-high purity synthetically produced spherical silica. The next steps utilize a proprietary multiple endcapping bonding process that produces highly base deactivated columns. The Chromegabond WR Cyano phase is a less hydrophobic phase than the alkyl C8 and C18 phases. The cyano functionality offers increased dipole interactions for alternative selectivity. It is suitable for RP (e.g. higher molecular weight compounds) and NP applications. Unlike Epic Cyano (non-endcapped), Chromegabond WR Cyano is endcapped which may provide a selectivity difference between the two products.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond WR Cyano	150	4.6	5	135291-WR-CN
Chromegabond WR Cyano	250	4.6	10	155391-WR-CN
Chromegabond WR Cyano	250	4.6	5	155291-WR-CN
Chromegabond WR Cyano	300	3.9	5	16e291-WR-CN
Chromegabond WR Cyano Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-WR-CN
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	500100

Other column dimensions, particle sizes and guard cartridges are available.
Please enquire for more details at LCA.TechSupport@perkinelmer.com

Chromegabond WR Phenyl

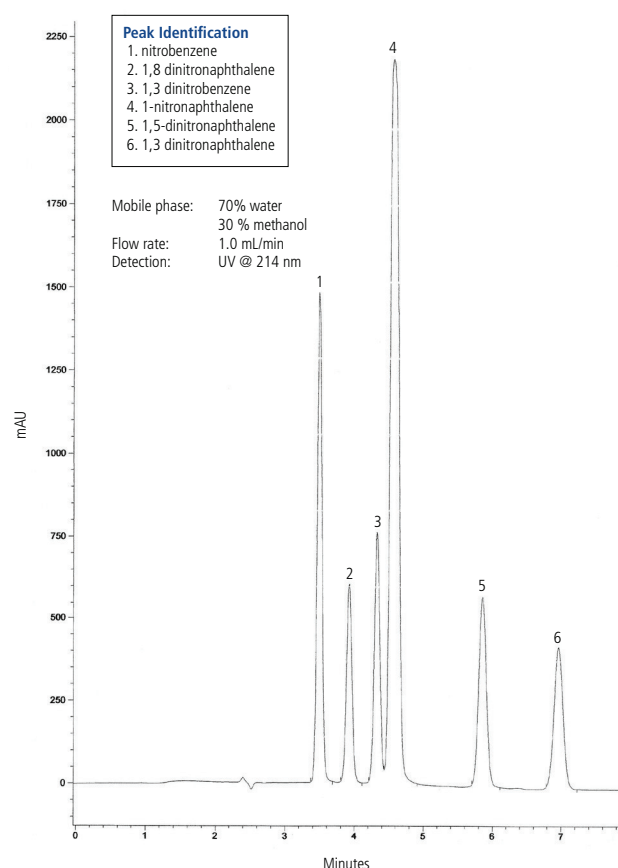
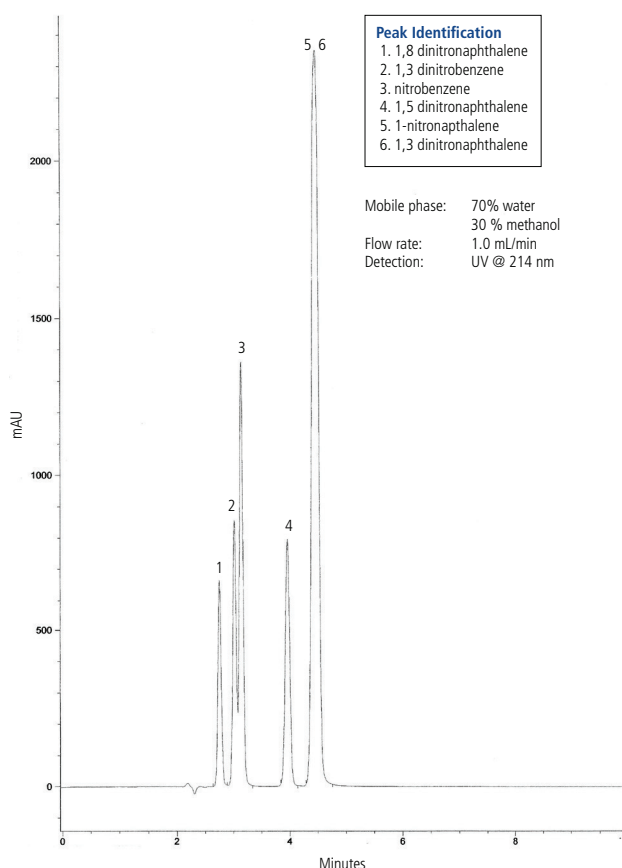
Chromegabond WR Phenyl is highly base deactivated phase that is produced via a multi-step process. The first step involves bonding phenyl groups to an ultra-high purity synthetically produced spherical silica. The next steps utilize a proprietary multiple endcapping bonding process that produces highly base deactivated columns. In comparison with Epic Phenyl, Chromegabond WR Phenyl uses a different silica with a lower surface area. In many cases, different silica can provide differences in retention and selectivity.

The Chromegabond WR Phenyl phase is π -basic (electron donating) and is similar in overall retention to alkyl phases. The alternate selectivity exhibited by phenyl phases is explained by the π - π interactions available through the phenyl ring. Applications include antibiotics, moderate bases such as anesthetics, and some acidic compounds such as phenols and aromatic acids.

Phase	Length (mm)	ID (mm)	Particle Size (μ m)	Part No.
Chromegabond WR Phenyl	150	3.0	3	133191-WR-PH
Chromegabond WR Phenyl Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-WR-PH
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	500100

Other column dimensions, particle sizes and guard cartridges are available.
Please enquire for more details at LCA.TechSupport@perkinelmer.com

HPLC analysis of nitroaromatic compounds using Chromegabond WR C18 (left) and Chromegabond WR Phenyl (right), 150 x 4.6 mm, 5 μ m.



Chromegabond WR Biphenyl

Chromegabond WR Biphenyl is highly base deactivated phase that is produced via a multi-step process. The first step involves bonding phenyl groups to an ultra-high purity synthetically produced spherical silica. The next steps utilize a proprietary multiple endcapping bonding process that produces highly base deactivated columns. In comparison with Epic Biphenyl, Chromegabond WR Biphenyl uses a different silica with a lower surface area. In many cases, different silica can provide differences in retention and selectivity.

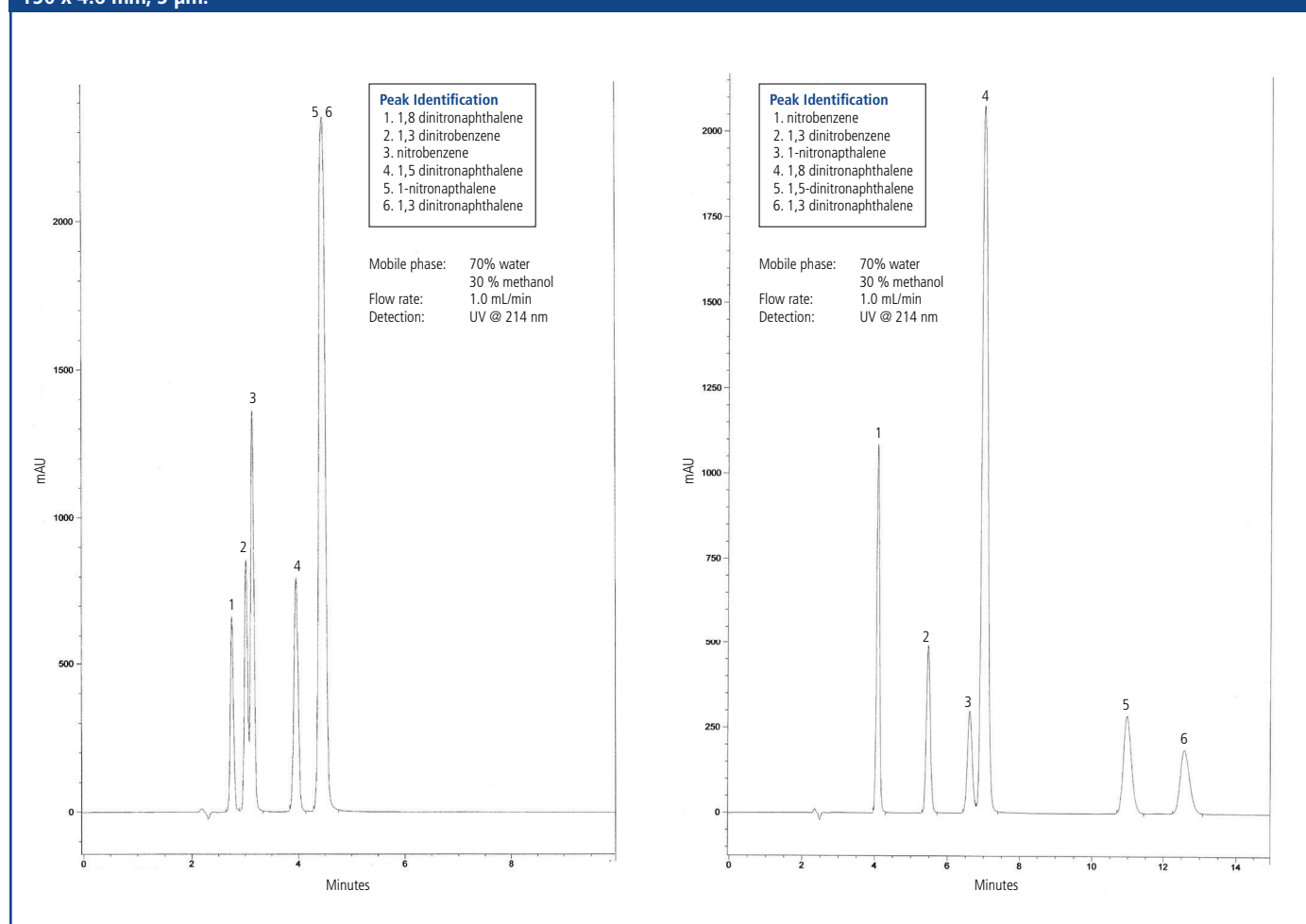
Chromegabond WR-Biphenyl is a truly unique stationary phase with properties significantly different than ODS phases. The unique character results from bonded biphenyl group imparting a π - π electron interaction which produces an enhanced retention for many compounds, particularly those that contain polarizable

electrons. Many classes of compounds contain polarizable electrons including halogenated compounds, aromatics, nitro aromatics and conjugated systems. In many cases, Chromegabond WR-Biphenyl provides alternative selectivity to pentafluorophenyl stationary phases.

Phase	Length (mm)	ID (mm)	Particle Size (μ m)	Part No.
Chromegabond WR-Biphenyl	50	2.1	5	112291-WR-BPH
Chromegabond WR-Biphenyl	100	2.1	5	122291-WR-BPH
Chromegabond WR-Biphenyl	150	2.1	5	132291-WR-BPH
Chromegabond WR-Biphenyl	150	4.6	5	135291-WR-BPH
Chromegabond WR Biphenyl Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-WR-BPH
Chromegabond WR Biphenyl Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-WR-BPH
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	500100

Other column dimensions, particle sizes and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

HPLC analysis of nitroaromatic compounds using Chromegabond WR C18 (left) and Chromegabond WR Biphenyl (right), 150 x 4.6 mm, 5 μ m.



Chromegabond LC Columns

ES Industries has developed a wide range of Chromegabond® phase columns to provide the means of separating a broad range of compounds. These phases are manufactured using established procedures and have been produced for a number of years to provide the chromatographer/QC chemist with continuous stream of highly reproducible columns. Many of these columns are useful for older USP designated methods, including Chromegabond Amino/Cyano, C2 and C6. The Chromegabond MC18 can provide alternative selectivity to other C18 columns due to the smaller 60 Å pore size. Additionally, the RP-SCX/IPI is an aromatic based strong cation exchanger with C8 alkyl chains, for ion exchange applications.

Features and Benefits

- Range of stationary phase chemistries to enhance method development
- Unique phases available, such as DNAP, Silver Silica, Amino/Cyano for the analysis of petroleum products
- Many phases are useful for older USP designated methods
- Preparative dimensions available to allow flexibility and full scalability



Material Characteristics

Brand	Phase*	Particle Size (µm)	Pore Size (Å)	Carbon %	End Cap	pH Range	USP Code
Chromegabond	MC18	3, 5, 10	60	18	Yes	2-8	L1
Chromegabond	PSC C8/C18	3, 5	100	14	Yes	2-8	L42
Chromegabond	DNAP II	5	100	—	No	2-8	—
Chromegabond	PPP/T	5	60	—	No	2-8	L43
Chromegabond	RP-SCX/IPI	5, 10	60	—	No	2-8	L44
Chromegabond	Amino/Cyano	3, 5, 10	60, 100	—	No	2-8	L18
Chromegabond	C2	5, 10	60	—	No	2-8	L16
Chromegabond	C6	3, 5	60	6	No	2-8	L15
Chromegabond	Silver Silica	5	60	—	No	—	—

Preparative columns of these phases are also available.
Please enquire for more details at LCA.TechSupport@perkinelmer.com

Chromegabond MC18

Chromegabond® MC18 columns are based on octadecyl bonding and provide reproducible separations with good peak symmetry. This phase is useful for hydrophobic and polar low molecular weight molecules. The Chromegabond MC18 can provide alternative selectivity to other C18 columns due to the smaller 60 Å pore size.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond MC18	50	2.1	5	112211-MC18
Chromegabond MC18	50	3.0	3	113123-MC18
Chromegabond MC18	100	2.1	3	122171-MC18
Chromegabond MC18	100	2.1	5	122211-MC18
Chromegabond MC18	100	4.0	10	124311-MC18
Chromegabond MC18	100	4.0	3	124111-MC18
Chromegabond MC18	100	4.6	5	125211-MC18
Chromegabond MC18	150	2.1	5	132211-MC18
Chromegabond MC18	150	3.9	5	13e211-MC18
Chromegabond MC18	150	4.0	10	134311-MC18
Chromegabond MC18	150	4.0	5	134211-MC18
Chromegabond MC18	150	4.6	5	135211-MC18
Chromegabond MC18	250	4.0	5	154221-MC18
Chromegabond MC18	250	4.6	10	155311-MC18
Chromegabond MC18	250	4.6	5	155211-MC18
Chromegabond MC18	300	4.0	10	164311-MC18
Chromegabond MC18	300	4.0	5	164221-MC18
Chromegabond MC18	300	4.6	10	165311-MC18
Chromegabond MC18 Prep	250	10	5	157211-MC18
Chromegabond MC18 Prep	250	20	5	158211-MC18
Chromegabond MC18 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-MC18
Chromegabond MC18 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-MC18
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	500100

Other column dimensions and guard cartridges are available.
Please enquire for more details at LCA.TechSupport@perkinelmer.com

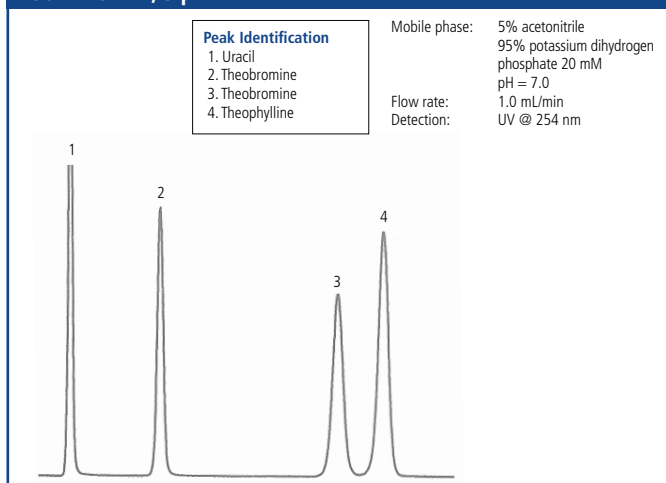
Chromegabond PSC C8/C18

Chromegabond® PSC (pharmaceutical separation column) is a unique C8/C18 combination stationary phase and is versatile for many pharmaceutical applications. This phase is prepared using a mixture of C8 and C18 groups. In addition to this unique bonding arrangement, PSC columns incorporate technology to produce PSC columns with a tightly controlled number of residual silanol groups. These columns are able to retain both highly polar and hydrophobic compounds. The Chromegabond PSC is a versatile column that can be used for applications requiring either a C8 or C18.

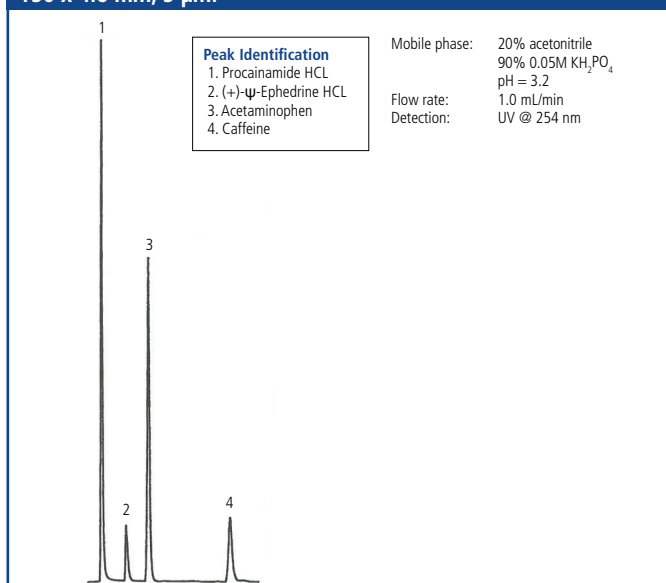
Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond PSC C8/C18	50	2.1	3	112121-PSC
Chromegabond PSC C8/C18	50	2.1	5	112221-PSC
Chromegabond PSC C8/C18	100	2.1	3	122121-PSC
Chromegabond PSC C8/C18	100	2.1	5	122221-PSC
Chromegabond PSC C8/C18	100	3.0	5	123221-PSC
Chromegabond PSC C8/C18	100	4.6	3	125121-PSC
Chromegabond PSC C8/C18	100	4.6	5	125221-PSC
Chromegabond PSC C8/C18	150	2.1	3	132121-PSC
Chromegabond PSC C8/C18	150	2.1	5	132221-PSC
Chromegabond PSC C8/C18	150	4.6	3	135121-PSC
Chromegabond PSC C8/C18	150	4.6	5	135221-PSC
Chromegabond PSC C8/C18	250	4.0	5	154221-PSC
Chromegabond PSC C8/C18	250	4.6	5	155221-PSC
Chromegabond PSC C8/C18 Prep	250	10	5	157221-PSC
Chromegabond PSC C8/C18 Prep	250	20	5	158221-PSC
Chromegabond PSC C8/C18 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-PSC
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	500100

Other column dimensions and guard cartridges are available.
Please enquire for more details at LCA.TechSupport@perkinelmer.com

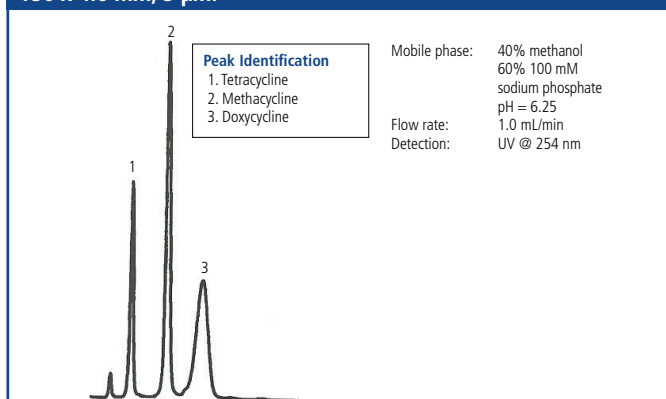
HPLC analysis of stimulants using Chromegabond PSC, 150 x 4.6 mm, 5 µm.



HPLC analysis of pharmaceuticals using Chromegabond PSC, 150 x 4.6 mm, 5 µm.



HPLC analysis of antibiotics using Chromegabond PSC, 150 x 4.6 mm, 5 µm.



Chromegabond DNAP II

Chromegabond® DNAP II (dinitroanilino propyl) columns, due to the electron deficient character of the aromatic ring, have a particularly strong affinity for aromatic solutes differing in the number of aromatic rings. Chromegabond DNAP II columns are designed specifically to handle complex petroleum samples and separate based on aromatic ring class, even for alkyl substituted aromatics which are normally more difficult to separate.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond DNAP II	100	4.6	5	125221-DNAP-II
Chromegabond DNAP II	150	4.6	5	135221-DNAP-II
Chromegabond DNAP II	250	4.6	5	155221-DNAP-II
Chromegabond DNAP II Prep	250	10	5	157221-DNAP-II
Chromegabond DNAP II Prep	250	20	5	158221-DNAP-II
Chromegabond DNAP II Analytical Guard Cartridges (Pkg. 5)	10	3	5	500101-DNAP-II
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	500100

Other column dimensions and guard cartridges are available.
Please enquire for more details at LCA.TechSupport@perkinelmer.com

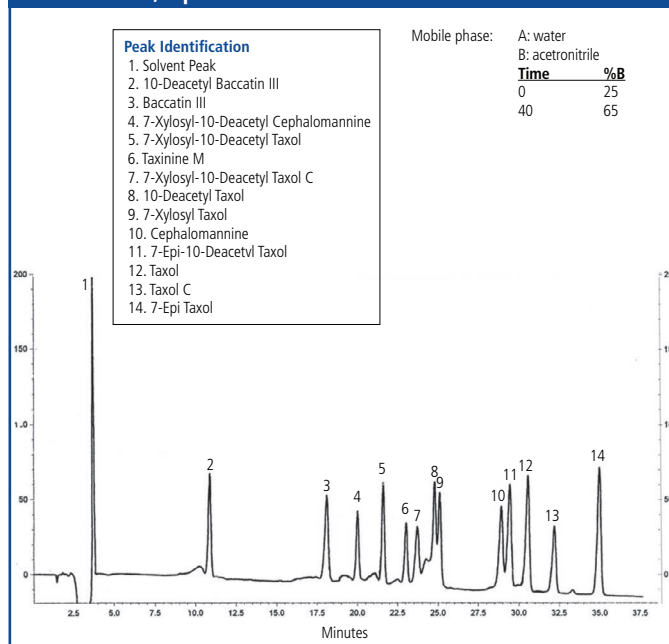
Chromegabond PFP/T

Chromegabond® PFP/T is specifically designed for the separation of Taxol mixtures. It is based on perfluorinated phenyl chemistry bonded to specially treated silica, yielding one of the finest analytical columns for the analysis of Taxol mixtures and Taxol related mixtures. The separation of a Taxol mixture is shown below.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond PFP/T	150	4.6	5	135211-PFP/T
Chromegabond PFP/T	250	4.0	5	154211-PFP/T
Chromegabond PFP/T	250	4.6	5	155211-PFP/T
Chromegabond PFP/T Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-PFP/T
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	500100

Other column dimensions and guard cartridges are available.
Please enquire for more details at LCA.TechSupport@perkinelmer.com

HPLC analysis of a taxol mixture using Chromegabond PFP/T, 250 x 4.6 mm, 5 µm.



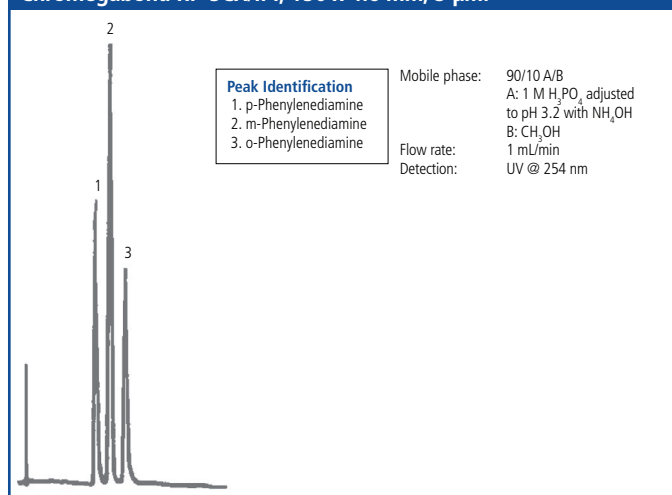
Chromegabond RP-SCX/IPI

Ion exchange is ideal for difficult to separate ionic compounds. As opposed to typical SCX phases, the Chromegabond® RP-SCX/IPI is a highly reproducible phase due to the robust bonding chemistry. The Chromegabond RP-SCX/IPI is an aromatic based strong cation exchanger with C8 alkyl chain used particularly for the analysis of isonicotinic acid, pyrazinamide and isoniazid in tablets. Chromatographers in the field have also used this column to produce a silver ion-exchange column for the separation of triglycerides.

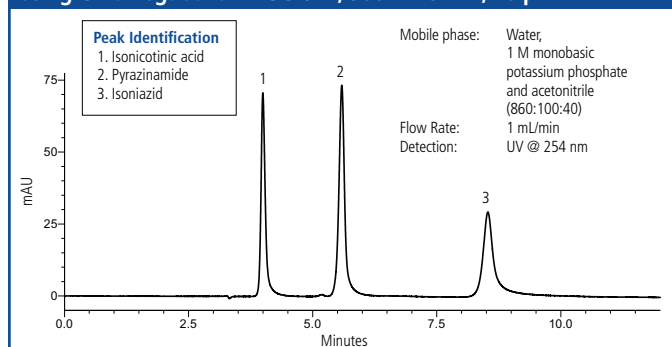
Phase	Length (mm)	ID (mm)	Particle Size (µm)
Chromegabond RP SCX/IPI	250	4.6	5
Chromegabond RP SCX/IPI	250	4.6	10
Chromegabond RP SCX/IPI	300	4.6	5
Chromegabond RP SCX/IPI	300	4.6	10

Please enquire for more details at LCA.TechSupport@perkinelmer.com

HPLC analysis of a phenylenediamine isomers using Chromegabond RP-SCX/IPI, 150 x 4.6 mm, 5 µm.



HPLC analysis of anti-tuberculosis drugs isoniazid and pyrazinamide using Chromegabond RP-SCX/IPI, 300 x 4.6 mm, 10 µm.



Chromegabond Amino/Cyano

Chromegabond Amino/Cyano columns are based on aminopropyl/cyanopropyl bonding. This phase can be used to separate polar compounds in both reverse phase and normal phase chromatography. Chromegabond Amino/Cyano can be used to determine nitrogen containing compounds in crude oil using normal phase chromatography.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond Amino Cyano	50	2.1	3	112111-A/CN
Chromegabond Amino Cyano	50	4.6	10	115311-A/CN
Chromegabond Amino Cyano	50	2.1	5	112211-A/CN
Chromegabond Amino Cyano	100	2.1	3	122111-A/CN
Chromegabond Amino Cyano	100	2.1	5	122211-A/CN
Chromegabond Amino Cyano	100	4.6	3	125111-A/CN
Chromegabond Amino Cyano	100	4.6	5	125211-A/CN
Chromegabond Amino Cyano	150	2.1	3	132111-A/CN
Chromegabond Amino Cyano	150	2.1	5	132211-A/CN
Chromegabond Amino Cyano	150	4.6	3	135111-A/CN
Chromegabond Amino Cyano	150	4.6	5	135211-A/CN
Chromegabond Amino Cyano	250	2.1	5	152211-A/CN
Chromegabond Amino Cyano	250	4.6	5	155211-A/CN
Chromegabond Amino Cyano	250	4.6	10	155311-A/CN
Chromegabond Amino Cyano Prep	250	10	5	157211-A/CN
Chromegabond Amino Cyano Prep	250	20	5	158211-A/CN
Chromegabond Amino Cyano Analytical Guard Cartridges (Pkg. 5)	10	3	5	500101-A/CN
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	500100

Other column dimensions and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

Chromegabond C2

Chromegabond® C2 columns (USP L16) are based on dimethyl bonding. Chromegabond C2 can be used for any USP assay that specifies an L16 column, and in many cases is used as an alternative to the Altmann Analytik LiChrosorb® RP-2. The dimethyl group is bonded to spherical silica to produce high performance packed columns. Chromegabond C2 can be used as the USP L16 column for analysis of temazepam capsules (treatment of insomnia), as well as cyclosporine injection and oral solution (an immunosuppressant drug).

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond C2	50	2.1	5	112211-C2
Chromegabond C2	100	2.1	5	122211-C2
Chromegabond C2	100	4.6	5	125211-C2
Chromegabond C2	150	2.1	5	132211-C2
Chromegabond C2	150	4.0	5	134211-C2
Chromegabond C2	150	4.6	5	135211-C2
Chromegabond C2	250	4.0	5	154211-C2
Chromegabond C2	250	4.6	5	155211-C2
Chromegabond C2	250	4.6	10	155311-C2
Chromegabond C2	300	4.6	5	165211-C2
Chromegabond C2	300	4.6	10	165311-C2
Chromegabond C2 Prep	250	10	5	157211-C2
Chromegabond C2 Prep	250	20	5	158211-C2
Chromegabond C2 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-C2
Chromegabond C2 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-C2
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	500100

Other column dimensions and guard cartridges are available.
Please enquire for more details at LCA.TechSupport@perkinelmer.com

Chromegabond C6

Chromegabond® C6 Columns (USP L15) are based on hexyl bonding and are not end capped. Chromegabond C6 can be used as the USP L15 column for USP assay of Topiramate and Topiramate related compounds, for example.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond C6	50	2.1	5	112211-C6
Chromegabond C6	100	2.1	5	122211-C6
Chromegabond C6	100	4.6	5	125211-C6
Chromegabond C6	150	2.1	5	132211-C6
Chromegabond C6	150	4.0	3	134111-C6
Chromegabond C6	150	4.0	5	134211-C6
Chromegabond C6	150	4.6	5	135211-C6
Chromegabond C6	250	4.6	5	155211-C6
Chromegabond C6 Prep	250	20	5	158211-C6
Chromegabond C6 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-C6
Chromegabond C6 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-C6
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	500100

Other column dimensions and guard cartridges are available.
Please enquire for more details at LCA.TechSupport@perkinelmer.com

Chromegabond Silver Silica

Chromegabond Silver Silica is a silica which is impregnated with silver. It is used primarily with SFC or with hexane in normal phase chromatography. Chromegabond Silver Silica is used to separate alkenes from aromatics in petroleum products and is used in ASTM Method D6550 – SFC Characterization of Olefins in Diesel Fuel.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond Silver Silica	50	4.6	5	115211-AG/SI
Chromegabond Silver Silica	100	3.0	5	123211-AG/SI
Chromegabond Silver Silica	100	4.6	5	125211-AG/SI
Chromegabond Silver Silica	150	4.6	5	135211-AG/SI
Chromegabond Silver Silica	250	2.1	5	152211-AG/SI
Chromegabond Silver Silica	250	4.0	5	154211-AG/SI
Chromegabond Silver Silica	250	4.6	5	155211-AG/SI
Chromegabond Silver Silica Prep	250	20	5	158211-AG/SI
Chromegabond Silver Silica Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-SI/AG
Chromegabond Silver Silica Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-SI/AG
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	500100

Other column dimensions and guard cartridges are available.
Please enquire for more details at LCA.TechSupport@perkinelmer.com