

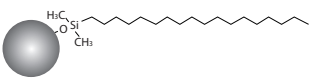
# Welchrom® Seires HPLC Column

-- Combination of perfect peak shape and lowest back pressure

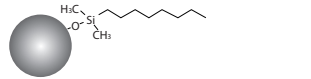
## Features:

- Perfect peak shape and low back pressure
- Ultra-high purity (>99.999%) Type B silica particles
- New Bonding and endcapping technique
- Economically priced

### Welchrom® C18

Structural Formula	
pH Range	1.5-10.0
Particle Size	5 µm
Surface Area(m <sup>2</sup> /g)	320(120 Å)
Carbon Loading(%)	19(120 Å)
USP List	L1
Endcapped	Yes

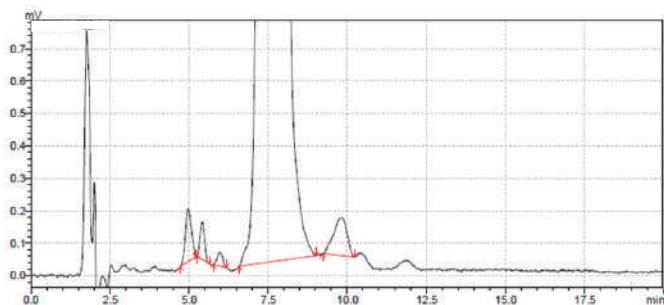
### Welchrom® C8

Structural Formula	
pH Range	1.5-10
Particle Size	5 µm
Surface Area(m <sup>2</sup> /g)	320(120 Å)
Carbon Loading(%)	12(120 Å)
USP List	L7
Endcapped	Yes

### Comparison with other brands

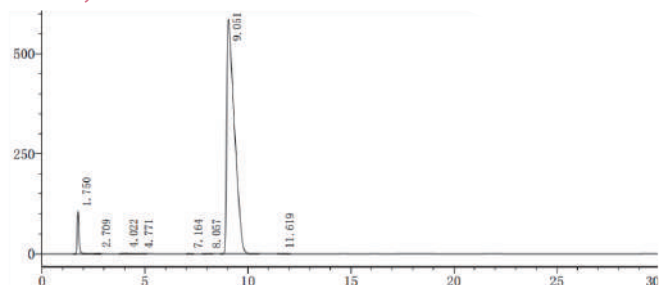
Brands	Tailing factor(amitriptyline)	Back pressure(Methanol/H <sub>2</sub> O)=75/25
Welchrom® XB-C18	1.29	77 bar
Chrom C18	1.52	108 bar
Sino Chrom C18	1.71	106 bar
BinChrom C18	1.67	102 bar

### Butenafine HCL



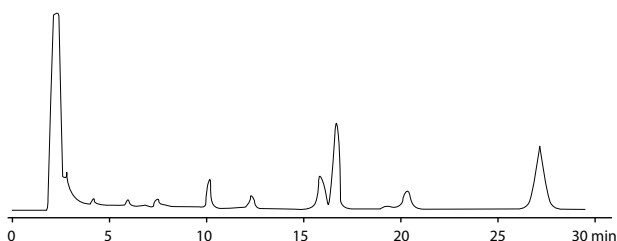
Column:	Welchrom® C18, 4.6x250 mm, 5 µm
Mobile Phase:	Acetate buffer/methanol/ isopropanol=17/70/13
Flow Rate:	1.0 mL/min
Temperature:	Ambient
Detector:	282 nm
Injection Volume:	10 µL

### Pentoxiverine citrate



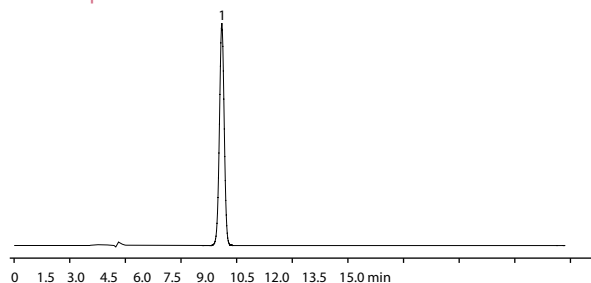
Column:	Welchrom® C18, 4.6x150 mm, 5 µm
Mobile Phase:	Water* /methanol=45/55 * Dilute 10 mL triethylamine to 1000 mL, adjust pH 3.0 with H <sub>3</sub> PO <sub>4</sub>
Flow Rate:	1.0 mL/min
Temperature:	30°C
Detector:	215 nm
Injection Volume:	20 µL

### Tanshinone IIA in *Salvia Miltiorrhiza*



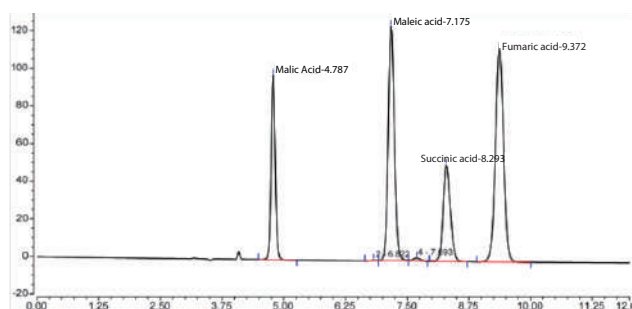
Column:	Welchrom® C18, 4.6x250 mm, 5 µm
Mobile Phase:	Methanol/water=75/25
Flow Rate:	1.0 mL/min
Temperature:	22°C
Detector:	270 nm

### Imidacloprid



Column:	Welchrom® C18, 250x4.6 mm, 5 µm
Mobile Phase:	Methanol/water=45/55
Flow Rate:	1.0 mL/min
Temperature:	25°C
Detector:	260 nm

### Malic acid



Column:	Welchrom® C8, 4.6x250 mm, 5 µm
Mobile Phase:	Phosphoric acid/methanol/water=1/100/900
Flow Rate:	0.8 mL/min
Temperature:	20°C
Detector:	214nm
Injection Volume:	5 µL

## Ordering Information

### 5 µm Welch Analytical Column

Bonded phase	Column ID (mm)	Column Length (mm)										Guard Cartridge	Cartridge holder
		30	50	75	100	125	150	200	250	300	10mm length		
C18	2.1	00310-02009	00310-02010	00310-02011	00310-02012	00310-02013	00310-02014	00310-02015	00310-02016	-	00808-24201	00808-01107	
	3.0	00310-02018	00310-02019	00310-02020	00310-02021	00310-02022	00310-02023	00310-02024	00310-02025	-	00808-24201	00808-01107	
	4.0	00310-02027	00310-02028	00310-02029	00310-02030	00310-02031	00310-02032	00310-02033	00310-02034	00310-02035	00808-04201	00808-01101	
	4.6	00310-02036	00310-02037	00310-02038	00310-02039	00310-02040	00310-02041	00310-02042	00310-02043	00310-02044	00808-04201	00808-01101	
C8	2.1	00320-02009	00320-02010	00320-02011	00320-02012	00320-02013	00320-02014	00320-02015	00320-02016	-	00808-24202	00808-01107	
	3.0	00320-02018	00320-02019	00320-02020	00320-02021	00320-02022	00320-02023	00320-02024	00320-02025	-	00808-24202	00808-01107	
	4.0	00320-02027	00320-02028	00320-02029	00320-02030	00320-02031	00320-02032	00320-02033	00320-02034	00320-02035	00808-04202	00808-01101	
	4.6	00320-02036	00320-02037	00320-02038	00320-02039	00320-02040	00320-02041	00320-02042	00320-02043	00320-02044	00808-04202	00808-01101	

Don't see your needed size or format? Contact Welch or your local distributor for other dimensions.

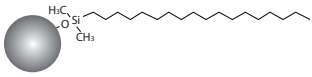
# Welchrom® Vantage C18

Welchrom® Vantage C18 column uses ultra-pure fully porous spherical silica as the matrix, and adopts the unique stationary phase bonding process and silica surface treatment technology. It is a new liquid phase with high column efficiency and high selectivity. The column has excellent chromatographic peak shape, separation efficiency, stability and reproducibility, and is especially suitable for the detection and application of multi-component complex matrices.

## Features

- Perfect peak shape and low back pressure
- Ultra-high purity(>99.999%) Type B silica particles
- New bonding and endcapping technique
- Economically priced

## Welchrom® Vantage C18

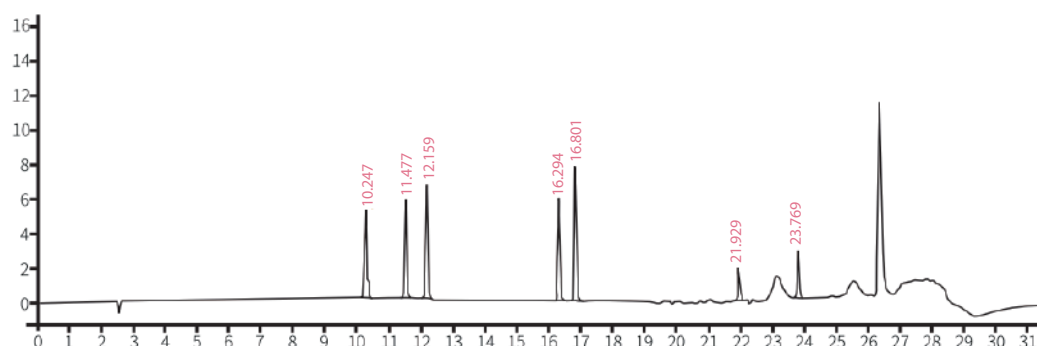
Structural Formula	
pH Range	2.0-8.0
Particle Size	5 µm
Surface Area(m <sup>2</sup> /g)	280(130 Å)
Carbon Loading(%)	13(130 Å)
USP List	L1
Endcapped	Yes

## Applications

### Seven Colorants in Cola

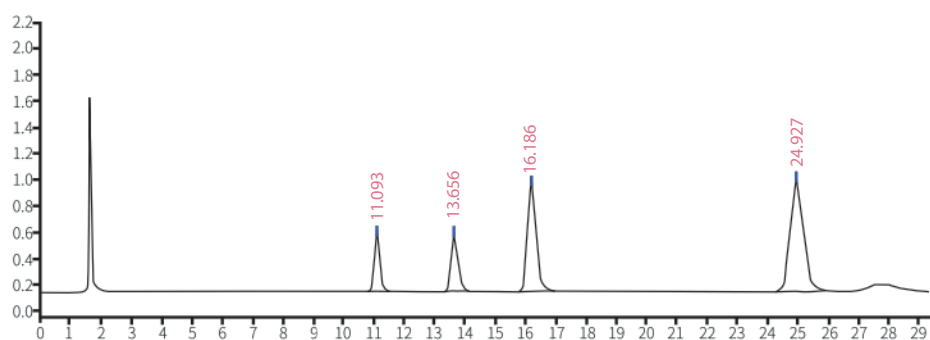
Column:	Welchrom® Vantage C18 Column (4.6×250mm, 5µm)
Mobile Phase:	Mobile Phase A: Acetonitrile Mobile Phase B: 100mM Ammonium Acetate
Flow Rate:	1.0 mL/min
Temperature:	40°C
Injection volume:	10µL
Detector:	245 nm

Time (min)	Mobile phase A(%)	Mobile phase B (%)
0	3	97
5	6	94
11	14	86
22	40	60
25	40	60
25.1	3	97
35	3	97



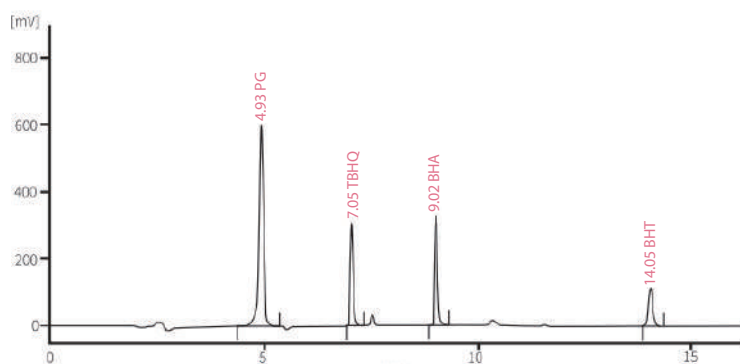
## Foxin in Fish

Column:	Welchrom® Vantage C18 Column (4.6×250mm,5µm)
Mobile Phase:	10mM tetrabutylammonium bromide (pH adjusted by phosphoric acid=3.0):acetonitrile=94:6
Flow Rate:	1.0 mL/min
Temperature:	35°C
Injection volume:	10µL
Detector:	Excitation wavelength 280nm, emission wavelength 480nm



## Antioxidants in food

Column:	Welchrom® Vantage C18 Column (4.6×250mm, 5µm)
Mobile Phase:	Mobile phase A: water: acetonitrile = 60: 40, containing 1% acetic acid Mobile phase B: acetonitrile (containing 1% acetic acid)
Flow Rate:	1.0 mL/min
Temperature:	40°C
Injection volume:	10µL
Detector:	245nm



Time (min)	Mobile phase A(%)	Mobile phase B (%)
0	100	0
1	100	0
5	10	90
16	10	90

## Ordering Information

P/N	Specification
00360-04041	Welchrom® Vantage C18, 5µm, 4.6×150mm
00360-04043	welchrom® Vantage C18, 5µm, 4.6×250mm
00360-04044	Welchrom® Vantage C18, 5µm, 4.6×300mm