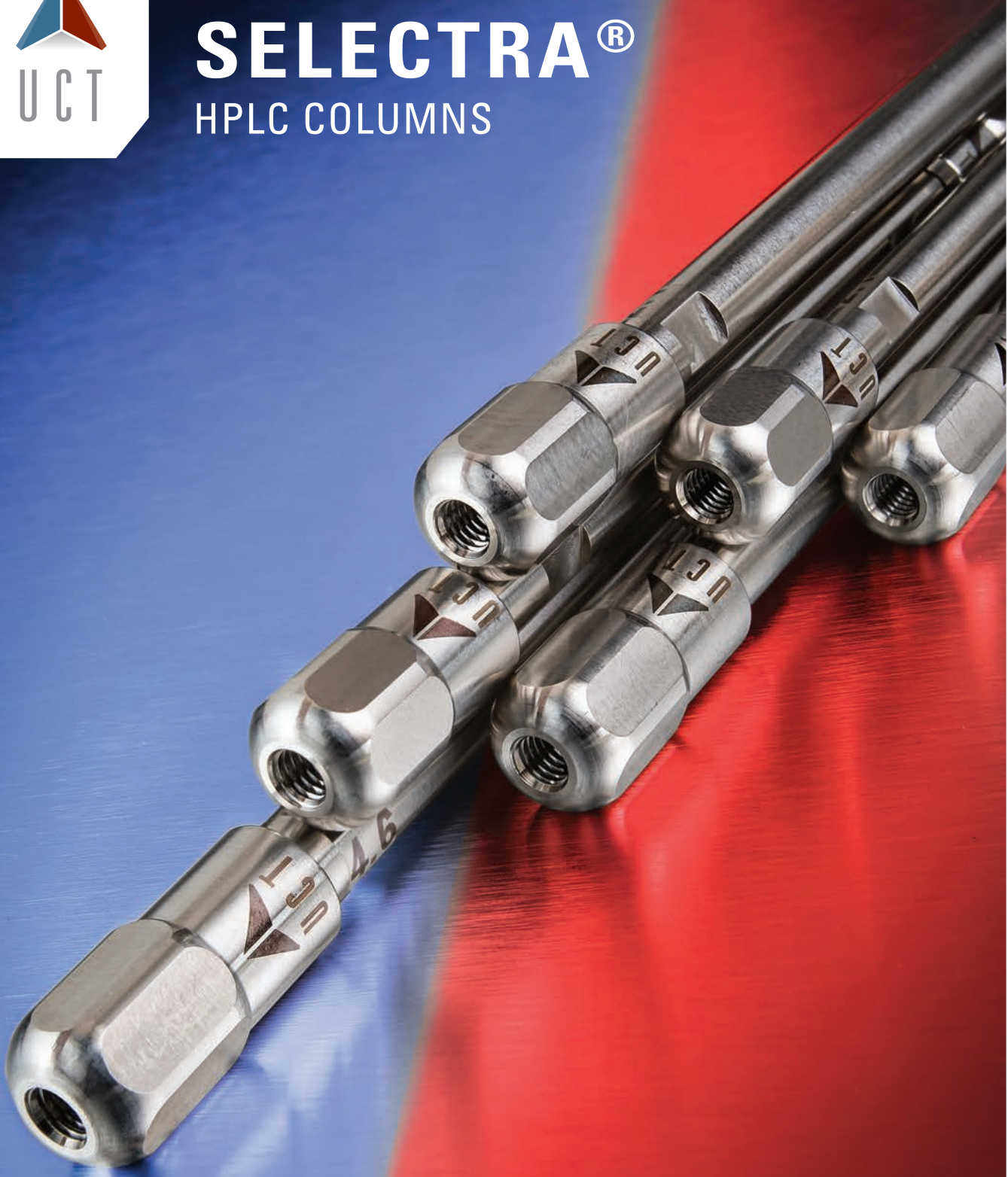




# SELECTRA®

HPLC COLUMNS



INNOVATION THROUGH CHEMISTRY

PFPP

EtG

DA

C18

AQC

C8

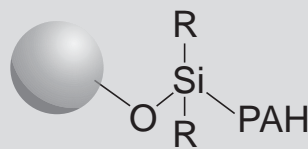


# 18

After more than 30 years, the UCT name continues to carry with it the same commitment to quality as it did when initially launching into the solid phase extraction market. The tradition continues with the release of the Selectra® HPLC column line. Manufacturing our own ultra-pure and highly reproducible silanes within an ISO 9001:2008 accredited facility, UCT then bonds these to the type B, spherical silica support to create stationary phases of unmatched quality. Currently, 1.8, 3 and 5 µm particle sizes are available. UCT continues to extend the range and capabilities of the Selectra family of columns with a growing number of chemistries, dimensions, and hardware formats to sustain the challenges of modern day chromatography.

All Selectra® HPLC columns are individually packed and QC tested to meet high standards for theoretical plate count and peak symmetry under Statistical Process Control. No batch column testing is ever executed, and each shipment comes with an individualized CoA containing data from the test mix run on that column.





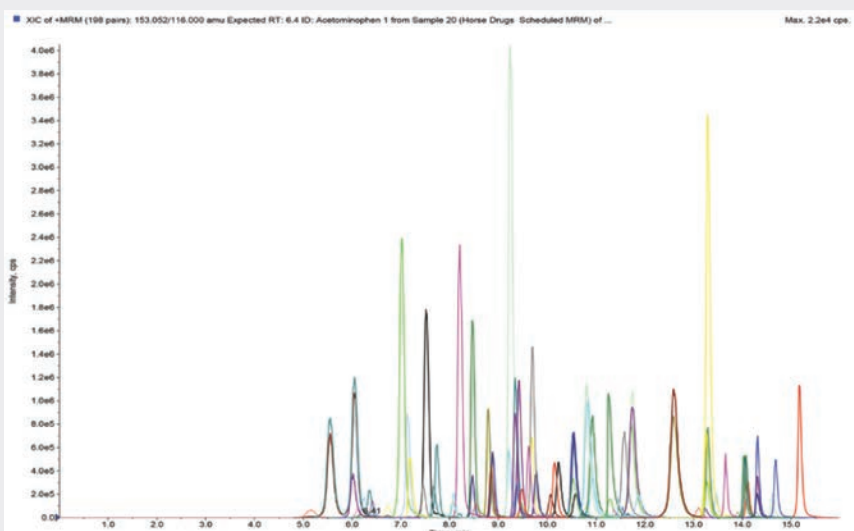
**Stationary Phase Category:** Polyaromatic  
**Particle Size:** 1.8, 3, 5  $\mu\text{m}$   
**Pore Size:** 100  $\text{\AA}$   
**Surface Area:** 300  $\text{m}^2/\text{g}$   
**Carbon Load:** 13%  
**USP:** L11

**Recommended Usage**  
**pH Range:** 2-8  
**Maximum Temperature:** 60°C  
**Maximum Pressure:** 1030 bar/15,000 psi (1.8-3 $\mu\text{m}$ )  
 or 275 bar/4,000 psi (5 $\mu\text{m}$ )

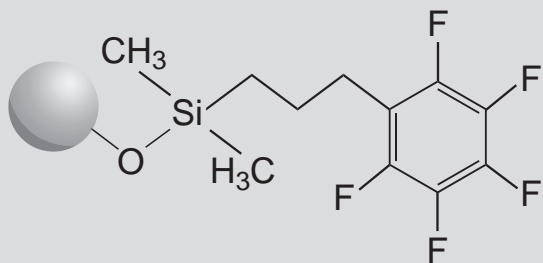
### Product Benefits

- Unique polyaromatic stationary phase
- High degree of retention and selectivity for aromatic and moderately polar analytes that are difficult to resolve or elute early on standard C18 phases
- Typical compound classes include:
  - Therapeutic Drugs
  - Drugs of Abuse
  - Pesticides
  - Mycotoxins

### Drug of Abuse Panel



**Column:** Selectra® DA 3  $\mu\text{m}$ , 100 x 2.1 mm  
**Mobile Phase A:** 0.1% Formic Acid in  $\text{H}_2\text{O}$   
**Mobile phase B:** 0.1% Formic Acid in MeOH  
**Gradient:** 5-60% B in 5 minutes  
 60% B hold 5 minutes  
 100% B hold 0.1 minutes  
**Flow:** 0.3mL/min  
**Detection:** AB Sciex 4000 Qtrap  
**Analytes:** Amphetamines/Sympaths  
 Analgesics  
 Benzodiazepines  
 Cardiac Drugs  
 Diuretics  
 Muscle Relaxers  
 NSAIDS  
 Opiates  
 TCA's



**Stationary Phase Category:** Pentafluorophenylpropyl

**Particle Size:** 1.8, 3, 5  $\mu\text{m}$

**Pore Size:** 100  $\text{\AA}$

**Surface Area:** 300  $\text{m}^2/\text{g}$

**Carbon Load:** 11%

**USP:** L43

**Recommended Usage**

**pH Range:** 2-8

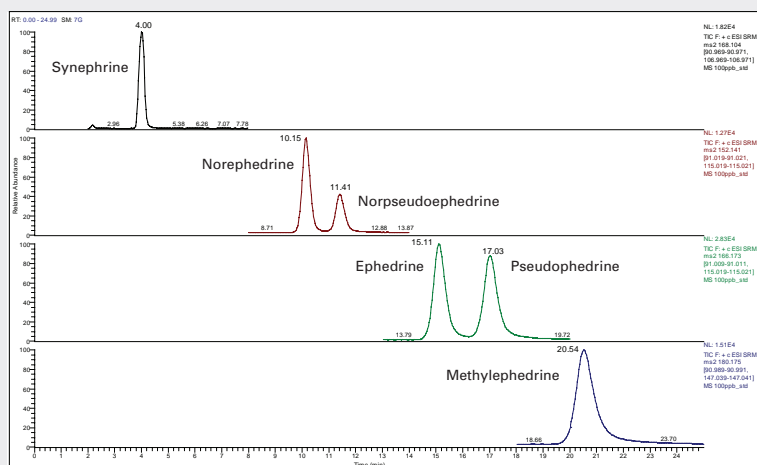
**Maximum Temperature:** 60°C

**Maximum Pressure:** 1030 bar/15,000 psi  
(1.8-3 $\mu\text{m}$ ) or 275 bar/4,000 psi (5 $\mu\text{m}$ )

## Product Benefits

- Can be used for Reverse Phase, Normal Phase, or HILIC separations
- Exhibits multiple selectivity mechanisms including hydrogen bonding, dipole dipole, pi-pi overlap, hydrophilic (HILIC), and hydrophobic interactions
- Typical compound classes include:
  - Beta-blockers
  - Tricyclic -antidepressants
  - Benzodiazepines
  - Catecholamines

## Ephedra Alkaloids



**Column:** Selectra® PFPP 3  $\mu\text{m}$ , 100 x 2.1 mm

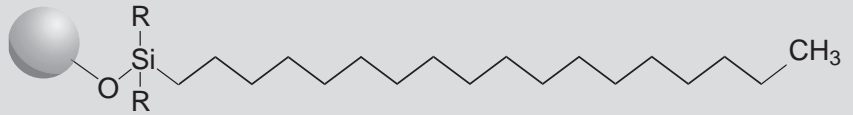
**Mobile Phase A:** 100 mM Ammonium Acetate

**Mobile phase B:** MeOH

**Isocratic:** 20%B

**Flow:** 0.3mL/min

**Detection:** Thermo Scientific TSQ Vantage



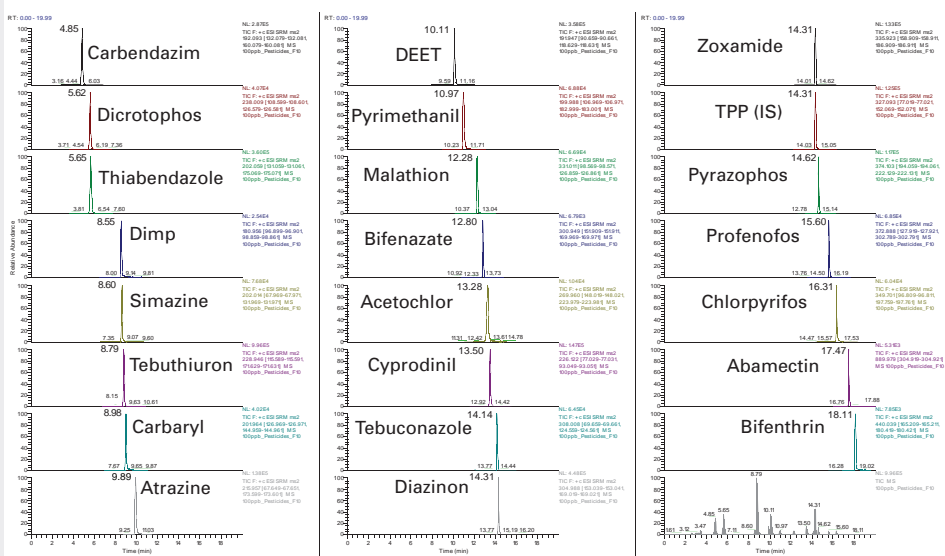
**Stationary Phase Category:** Octadecylsilane  
**Particle Size:** 1.8, 3, 5 µm  
**Pore Size:** 100 Å  
**Surface Area:** 300 m<sup>2</sup>/g  
**Carbon Load:** 20%  
**USP:** L1

**Recommended Usage**  
**pH Range:** 2-9.5  
**Maximum Temperature:** 80°C  
**Maximum Pressure:** 1030 bar/15,000 psi (1.8-3µm)  
 or 275 bar/4,000 psi (5µm)

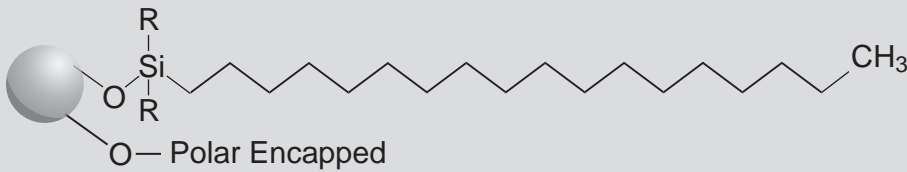
### Product Benefits

- Optimum retention for traditional reverse phase analyses
- Highest hydrophobic interactions in the Selectra® column line
- Excellent carbon loading
- Fully endcapped.

### Pesticide Panel



**Column:** Selectra® C18 3 µm, 100 x 2.1 mm  
**Mobile phase a:** 0.3% Formic Acid and 0.1% Ammonium Formate  
**Mobile phase b:** 0.1% Formic Acid in MeOH  
**Gradient:** 5-30% B in 1 minute  
 30-60% B in 1 minute  
 60-100% B in 8 minutes  
**Flow:** 0.3 mL/min  
**Detection:** AB Sciex 4000 QTRAP



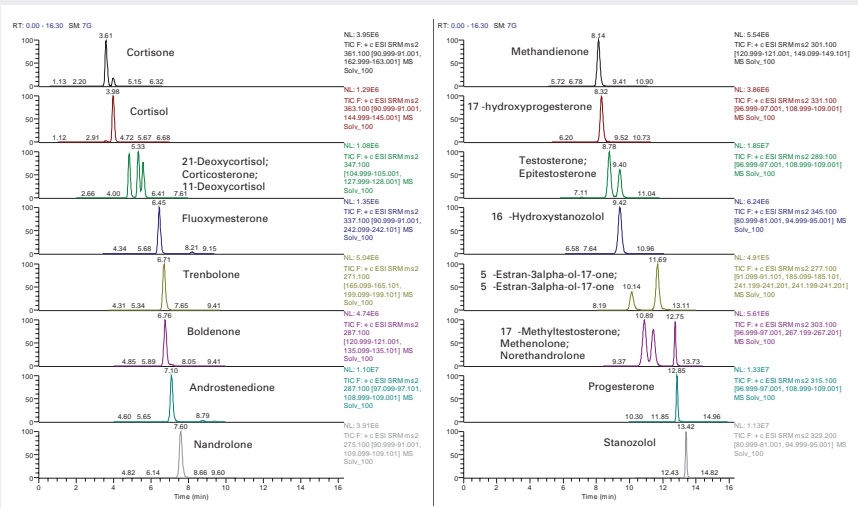
**Stationary Phase Category:** Polar Modified Octadecylsilane  
**Particle Size:** 1.8, 3, 5 μm  
**Pore Size:** 100 Å  
**Surface Area:** 300 m<sup>2</sup>/g  
**Carbon Load:** 11%  
**USP:** L1

**Recommended Usage**  
**pH Range:** 2-8  
**Maximum Temperature:** 60°C  
**Maximum Pressure:** 1030 bar/15,000 psi (1.8-3μm) or 275 bar/4,000 psi (5μm)

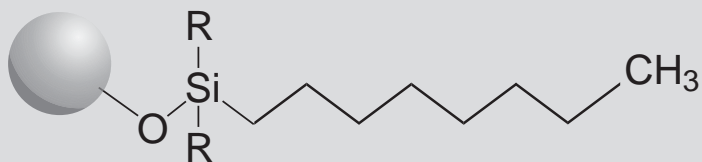
### Product Benefits

- Similar non-polar retention to traditional C18
- Enhanced selectivity and retention for difficult to retain polar analytes
- Suitable in up to 100% aqueous mobile phases
- Greater range of mobile phase options

### Anabolic Steroids



**Column:** Selectra® Aqueous C18 3 μm, 100 x 2.1 mm  
**Mobile Phase A:** 20 mM Ammonium Formate  
**Mobile phase B:** 0.1% Formic Acid in MeOH  
**Gradient:** 50-60% B in 2 minutes  
 60% B in 7 minutes  
 60-100% B in 3 minutes  
**Flow:** 0.3mL/min  
**Detection:** Thermo Scientific TSQ Vantage



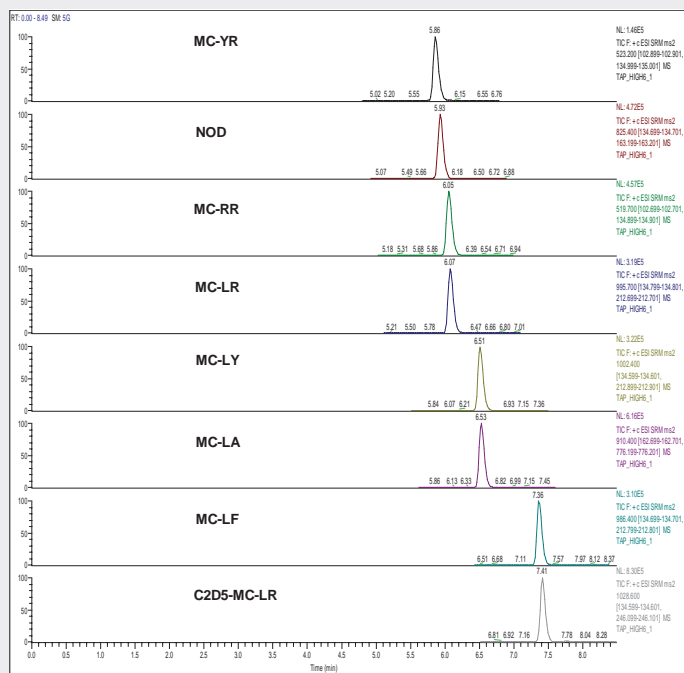
**Stationary Phase Category:** Octyl  
**Particle Size:** 1.8, 3, 5 µm  
**Pore Size:** 100Å  
**Surface Area:** 300 m2/g  
**Carbon Load:** 12%  
**USP:** L7

**Recommended Usage**  
**Ph Range:** 2-8  
**Maximum Temperature:** 60°C  
**Maximum Pressure:** 1030 bar/15,000 psi (1.8-3µm)  
 or 275 bar/4,000 psi (5µm)

**Product Benefits**

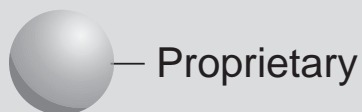
- Selectivity similar to C18 for non-polar compounds
- Less retentive, less hydrophobic than standard C18 column
- Excellent carbon loading
- Fully endcapped

**EPA Method 544: Determination of Microcystins and Nodularin in Drinking Water**



**Column:** Selectra® C8 3 µm, 100 × 2.1 mm  
**Mobile Phase A:** 20 mM Ammonium Formate  
**Mobile Phase B:** MeOH  
**Gradient:** 10% B for 1 minute  
 60% B in 0.5 minutes; Hold for 1 minute  
 90% B in 4 minutes; Hold for 1.5 minutes  
 10% B in 0.1 minutes  
**Flow:** 0.3 mL/min  
**Detection:** Thermo Scientific TSQ Vantage





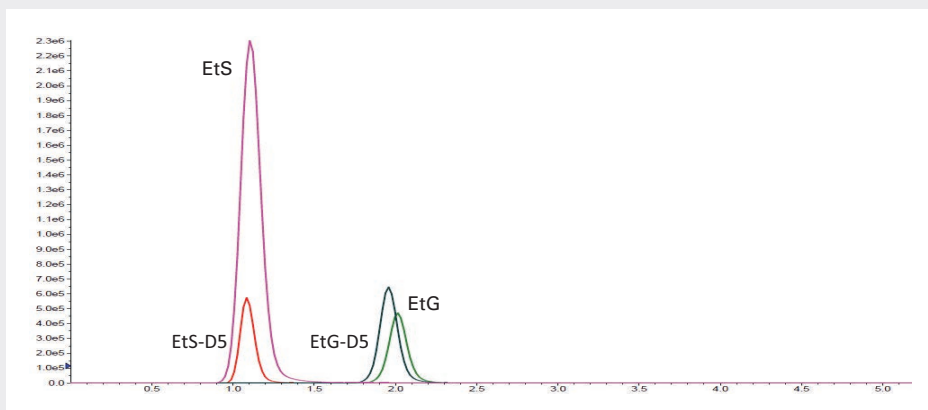
**Stationary Phase Category:** Proprietary  
**Particle Size:** 1.8, 3, 5  $\mu\text{m}$   
**Pore Size:** 100  $\text{\AA}$   
**Surface Area:** 300  $\text{m}^2/\text{g}$   
**Carbon Load:** 11%  
**USP:** L1

**Recommended Usage**  
**pH Range:** 2-8  
**Maximum Temperature:** 60°C  
**Maximum Pressure:** 1030 bar/15,000 psi (1.8-3 $\mu\text{m}$ )  
 or 275 bar/4,000 psi (5 $\mu\text{m}$ )

### Product Benefits

- Proprietary phase designed to maximize retention for polar EtG/EtS alcohol metabolites
- Baseline resolution differentiating EtG and EtS
- Suitable in up to 100% aqueous mobile phases

### EtG/EtS Analysis



**Column:** Selectra® EtG 3  $\mu\text{m}$ , 100 x 2.1 mm  
**Mobile Phase A:** 0.1% Formic Acid in  $\text{H}_2\text{O}$   
**Mobile phase B:** 0.1% Formic Acid in ACN  
**Gradient:** 0% B for 1.5 minutes  
 100% B in 0.2 minutes  
**Flow:** 0.3mL/min  
**Detection:** AB Sciex 4000 Qtrap

# EQUIVALENCY CHART

## VENDOR

## COLUMNS

## UCT

Agilent

Zorbax C8

SELECTRA® C8

Agilent

Polaris C18-A

SELECTRA® AQ

Agilent

Zorbax C18

SELECTRA® C18

Alltech

Alltima C18

SELECTRA® C18

GL Sciences

Inertsil C8

SELECTRA® C8

GL Sciences

Inertsil ODS3

SELECTRA® C18

Machery-Nagel

Nucleosil C8

SELECTRA® C8

Machery-Nagel

Nucleosil C18

SELECTRA® C18

Merck

Lichrosorb RP C18

SELECTRA® C18

Perkin Elmer

Brownlee Validated Aqueous C18

SELECTRA® AQ

Perkin Elmer

Choice PFPP

SELECTRA® PFPP

Phenomenex

Luna C8

SELECTRA® C8

Phenomenex

Luna C18

SELECTRA® C18

Phenomenex

Luna PFP(2)

SELECTRA® PFPP

Restek

Ultra C8

SELECTRA® C8

Restek

Ultra C18

SELECTRA® C18

Restek

Pinnacle DB Biphenyl

SELECTRA® DA

Restek

Pinnacle DB PFPP

SELECTRA® PFPP

Restek

ULTRA PFPP

SELECTRA® PFPP

Supelco

Ascentis C8

SELECTRA® C8

Supelco

Discovery HS F5

SELECTRA® PFPP

Thermo-Fisher

Hypersil GOLD C8

SELECTRA® C8

Thermo-Fisher

BDS Hypersil C18

SELECTRA® C18

Thermo-Fisher

Betasil C18

SELECTRA® C18

Thermo-Fisher

Hypersil Gold C18

SELECTRA® C18

Waters

Symmetry C8

SELECTRA® C8

Waters

Xttera C18 RP

SELECTRA® C18

YMC

YMC ODS-AQ

SELECTRA® AQ

## ORDERING INFO

### HPLC Guard Holder

### Part Numbers

HPLC Guard Cartridge Holder	SLGRDHLDR	
Replacement Peek Tip for Holder	SLGRDHLDR-TIP	(2/pk)

### SELECTRA® DA HPLC Columns

Dimensions	Particle Size	Part Numbers
50 x 2.1 mm	1.8 µm	SLDA50ID21-18UM
100 x 2.1 mm	1.8 µm	SLDA100ID21-18UM
50 x 4.6 mm	1.8 µm	SLDA50ID46-18UM
100 x 4.6 mm	1.8 µm	SLDA100ID46-18UM
10 x 2.1 mm guard (sold as a 2 pack)	1.8 µm	SLDAGDC20-18UM
10 x 4.6 mm guard (sold as a 2 pack)	1.8 µm	SLDAGDC46-18UM
<hr/>		
50 x 2.1 mm	3 µm	SLDA50ID21-3UM
100 x 2.1 mm	3 µm	SLDA100ID21-3UM
50 x 4.6 mm	3 µm	SLDA50ID46-3UM
100 x 4.6 mm	3 µm	SLDA100ID46-3UM
10 x 2.1 mm guard (sold as a 2 pack)	3 µm	SLDAGDC21-3UM
10 x 4.6 mm guard (sold as a 2 pack)	3 µm	SLDAGDC46-3UM
<hr/>		
50 x 2.1 mm	5 µm	SLDA50ID21-5UM
100 x 2.1 mm	5 µm	SLDA100ID21-5UM
50 x 4.6 mm	5 µm	SLDA50ID46-5UM
100 x 4.6 mm	5 µm	SLDA100ID46-5UM
150 x 4.6 mm	5 µm	SLDA150ID46-5UM
250 x 4.6 mm	5 µm	SLDA250ID46-5UM
10 x 2.1 mm guard (sold as a 2 pack)	5 µm	SLDAGDC21-5UM
10 x 4.6 mm guard (sold as a 2 pack)	5 µm	SLDAGDC46-5UM

## SELECTRA® PFPP HPLC Columns

<b>Dimensions</b>	<b>Particle Size</b>	<b>Part Numbers</b>
50 x 2.1 mm	1.8 µm	SLPFPP50ID21-18UM
100 x 2.1 mm	1.8 µm	SLPFPP100ID21-18UM
50 x 4.6 mm	1.8 µm	SLPFPP50ID46-18UM
100 x 4.6 mm	1.8 µm	SLPFPP100ID46-18UM
10 x 2.1 mm guard (sold as a 2 pack)	1.8 µm	SLPFPPGDC20-18UM
10 x 4.6 mm guard (sold as a 2 pack)	1.8 µm	SLPFPPGDC46-18UM
<hr/>		
50 x 2.1 mm	3 µm	SLPFPP50ID21-3UM
100 x 2.1 mm	3 µm	SLPFPP100ID21-3UM
50 x 4.6 mm	3 µm	SLPFPP50ID46-3UM
100 x 4.6 mm	3 µm	SLPFPP100ID46-3UM
150 x 4.6 mm	3 µm	SLPFPP150ID46-3UM
10 x 2.1 mm guard (sold as a 2 pack)	3 µm	SLPFPPGDC20-3UM
10 x 4.6 mm guard (sold as a 2 pack)	3 µm	SLPFPPGDC46-3UM
<hr/>		
50 x 2.1 mm	5 µm	SLPFPP50ID21-5UM
100 x 2.1 mm	5 µm	SLPFPP100ID21-5UM
50 x 4.6 mm	5 µm	SLPFPP50ID46-5UM
100 x 4.6 mm	5 µm	SLPFPP100ID46-5UM
150 x 4.6 mm	5 µm	SLPFPP150ID46-5UM
250 x 4.6 mm	5 µm	SLPFPP250ID46-5UM
10 x 2.1 mm guard (sold as a 2 pack)	5 µm	SLPFPPGDC20-5UM
10 x 4.6 mm guard (sold as a 2 pack)	5 µm	SLPFPPGDC46-5UM

## SELECTRA® C18 HPLC Columns

Dimensions	Particle Size	Part Numbers
50 x 2.1 mm	1.8 µm	SLC-1850ID21-18UM
100 x 2.1 mm	1.8 µm	SLC-18100ID21-18UM
50 x 4.6 mm	1.8 µm	SLC-1850ID46-18UM
100 x 4.6 mm	1.8 µm	SLC-18100ID46-18UM
10 x 2.1 mm guard (sold as a 2 pack)	1.8 µm	SLC-18GDC20-18UM
10 x 4.6 mm guard (sold as a 2 pack)	1.8 µm	SLC-18GDC46-18UM
<hr/>		
50 x 2.1 mm	3 µm	SLC-1850ID21-3UM
100 x 2.1 mm	3 µm	SLC-18100ID21-3UM
50 x 4.6 mm	3 µm	SLC-1850ID46-3UM
100 x 4.6 mm	3 µm	SLC-18100ID46-3UM
150 x 4.6 mm	3 µm	SLC-18150ID46-3UM
10 x 2.1 mm guard (sold as a 2 pack)	3 µm	SLC-18GDC20-3UM
10 x 4.6 mm guard (sold as a 2 pack)	3 µm	SLC-18GDC46-3UM
<hr/>		
50 x 2.1 mm	5 µm	SLC-1850ID21-5UM
100 x 2.1 mm	5 µm	SLC-18100ID21-5UM
50 x 4.6 mm	5 µm	SLC-1850ID46-5UM
100 x 4.6 mm	5 µm	SLC-18100ID46-5UM
150 x 4.6 mm	5 µm	SLC-18150ID46-5UM
250 x 4.6 mm	5 µm	SLC-18250ID46-5UM
10 x 2.1 mm guard (sold as a 2 pack)	5 µm	SLC-18GDC20-5UM
10 x 4.6 mm guard (sold as a 2 pack)	5 µm	SLC-18GDC46-5UM

## SELECTRA® Aqueous C18 HPLC Columns

Dimensions	Particle Size	Part Numbers
50 x 2.1 mm	1.8 µm	SLAQ50ID21-18UM
100 x 2.1 mm	1.8 µm	SLAQ100ID21-18UM
50 x 4.6 mm	1.8 µm	SLAQ50ID46-18UM
100 x 4.6 mm	1.8 µm	SLAQ100ID46-18UM
10 x 2.1 mm guard (sold as a 2 pack)	1.8 µm	SLAQGDC20-18UM
10 x 4.6 mm guard (sold as a 2 pack)	1.8 µm	SLAQGDC46-18UM

---

50 x 2.1 mm	3 µm	SLAQ50ID21-3UM
100 x 2.1 mm	3 µm	SLAQ100ID21-3UM
50 x 4.6 mm	3 µm	SLAQ50ID46-3UM
100 x 4.6 mm	3 µm	SLAQ100ID46-3UM
150 x 4.6 mm	3 µm	SLAQ150ID46-3UM
10 x 2.1 mm guard (sold as a 2 pack)	3 µm	SLAQGDC20-3UM
10 x 4.6 mm guard (sold as a 2 pack)	3 µm	SLAQGDC46-3UM

---

50 x 2.1 mm	5 µm	SLAQ50ID21-5UM
100 x 2.1 mm	5 µm	SLAQ100ID21-5UM
50 x 4.6 mm	5 µm	SLAQ50ID46-5UM
100 x 4.6 mm	5 µm	SLAQ100ID46-5UM
150 x 4.6 mm	5 µm	SLAQ150ID46-5UM
250 x 4.6 mm	5 µm	SLAQ250ID46-5UM
10 x 2.1 mm guard (sold as a 2 pack)	5 µm	SLAQGDC20-5UM
10 x 4.6 mm guard (sold as a 2 pack)	5 µm	SLAQGDC46-5UM

## SELECTRA® EtG HPLC Columns

Dimensions	Particle Size	Part Numbers
100 x 2.1 mm	3 µm	SLETG100ID21-3UM
10 x 2.1 mm guard (sold as a 2 pack)	3 µm	SLETGGDC20-3UM

## SELECTRA® C8 HPLC Columns

Dimensions	Particle Size	Part Numbers
50 x 2.1 mm	1.8 µm	SLC-850ID21-18UM
100 x 2.1 mm	1.8 µm	SLC-8100ID21-18UM
50 x 4.6 mm	1.8 µm	SLC-850ID46-18UM
100 x 4.6 mm	1.8 µm	SLC-8100ID46-18UM
10 x 2.1 mm guard (sold as a 2 pack)	1.8 µm	SLC-8GDC21-18UM
10 x 4.6 mm guard (sold as a 2 pack)	1.8 µm	SLC-8GDC46-18UM
<hr/>		
50 x 2.1 mm	3 µm	SLC-850ID21-3UM
100 x 2.1 mm	3 µm	SLC-8100ID21-3UM
50 x 4.6 mm	3 µm	SLC-850ID46-3UM
100 x 4.6 mm	3 µm	SLC-8100ID46-3UM
150 x 4.6 mm	3 µm	SLC-8150ID46-3UM
10 x 2.1 mm guard (sold as a 2 pack)	3 µm	SLC-8GDC21-3UM
10 x 4.6 mm guard (sold as a 2 pack)	3 µm	SLC-8GDC46-3UM
<hr/>		
50 x 2.1 mm	5 µm	SLC-850ID21-5UM
100 x 2.1 mm	5 µm	SLC-8100ID21-5UM
50 x 4.6 mm	5 µm	SLC-850ID46-5UM
100 x 4.6 mm	5 µm	SLC-8100ID46-5UM
150 x 4.6 mm	5 µm	SLC-8150ID46-5UM
250 x 4.6 mm	5 µm	SLC-8250ID46-5UM
10 x 2.1 mm guard (sold as a 2 pack)	5 µm	SLC-8GDC21-5UM
10 x 4.6 mm guard (sold as a 2 pack)	5 µm	SLC-8GDC46-5UM

## PRICES AND TERMS

Our prices are subject to change without notice. The price in effect when we receive your order will apply. All prices are in US Dollars and are F.O.B. Terms of payment are net 30 days.

## MINIMUM ORDERS

We welcome all orders, therefore, we do not have a minimum order requirement. When ordering, please include your purchase order number, complete "Ship To" and "Bill To" address, catalog number, quantity, and description of product(s). Also include your name and a phone number where you can be reached should we have any questions concerning your order.

## SHIPMENTS

Normal processing is within 24 hours after receipt of an order. Unless special shipping requests have been made, our trained staff will send all orders by UPS Ground service. The appropriate shipping charges (freight & insurance costs) will be added to the invoice, unless otherwise instructed by the customer.

## SPECIAL PRICING

We offer special pricing for volume purchases and standing orders. Please call a sales representative for more information on special pricing qualifications.

## RETURN POLICY

Our Quality Manager will handle all returns. Before returning merchandise, please call to obtain a return authorization number from the quality manager. We will need to know the reason for the return, date of purchase, purchase order number and invoice number in order to issue a return authorization number. Return merchandise must be received before a credit can be issued. Returns will not be accepted after 90 days. A restocking fee of 25% of the price paid, or a minimum of \$25.00 (whichever is greater) will be charged on all returns.

## WARRANTY

All products manufactured by UCT are guaranteed against defects in materials and workmanship for a period of 90 days after shipment. UCT will replace any items that prove to be defective during this time period.

The exclusive remedy requires the end user to first advise UCT of the defective product by phone or in writing. Secondly, the defective product must be returned within 30 days after proper approval from our Quality Manager. All returns must indicate the purchase order number, the lot number and the shipping date. UCT's total liability is limited to the replacement cost of UCT products.

This warranty does not apply to damage resulting from misuse.

---

**For the latest information on the complete line of Selectra® HPLC columns and supplies:**

---

Phone: 215.781.9255  
800.385.3153  
Fax: 215.785.1226

UCT, Inc.  
2731 Bartram Rd.  
Bristol, PA 19007

Email: [info@unitedchem.com](mailto:info@unitedchem.com)  
Web: [www.unitedchem.com](http://www.unitedchem.com)



5110-02-04

