



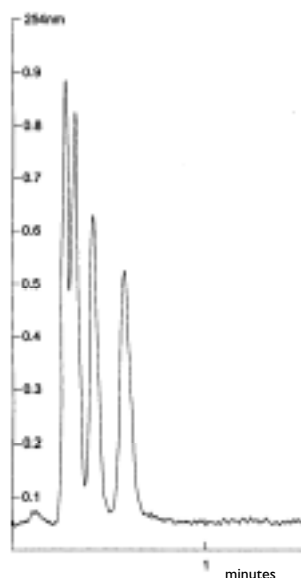
## Polymeric Phases in Small Formats

### Unique Features:

- pH 1 to 14 operating range
- Uniform hydrophobicity
- Absence of any silanols
- Very high selectivity
- Orthogonality for 2D methods
- Mechanically and chemically robust

### Physical Properties:

- PLRP-S  
Reverse phase media  
100Å and 300Å Pore size  
3µm particle size; and 1000Å, 5µm
- PL-SAX  
Strong anion exchanger  $-N(CH_3)_3^+$   
1000Å Pore size  
5µm particle size
- PL-SCX  
Strong cation exchanger  $-SO_3^-$   
1000Å Pore size  
5µm particle size



### High Speed on a 1cm x 1mm PLRP-S:

Polymer Labs PLRP-S 3µm in a Higgins Analytical 10x1mm Piccolo HPLC column P/N:PLP-0101-RP13  
(1) Methylparaben, (2) Ethylparaben,  
(3) Propylparaben, (4) Butylparaben  
50% MeCN/water, 50µL/min

# Polymeric

## PLRP-S

## PL-SAX

## PL-SCX

Higgins Analytical now manufactures a wide range of small column and cartridge formats with polymeric phases from Polymer Labs Ltd.

This powerful array of media provides chromatographers with unique solutions for challenging HPLC applications. In addition to not having the pH limitations inherent to all silica-based sorbents, these polymeric phases provide an orthogonal tool for addressing difficult protocols and multi-dimensional techniques. The relatively high capacity and unique selectivity of these robust phases can often provide a separation under harsh conditions that cannot be addressed with popular silica-based columns.

The rigid porous structure and chemical stability of Polymer Labs media make them compatible with the wide range organic solvents typically used in modern HPLC methods. In addition to insuring long mechanical and chemical life times, this robustness also provides an ability for these polymeric phases to be rejuvenated under chemical and thermal conditions that would be unthinkable to subject a conventional HPLC column.

The uniform hydrophobicity and absence of acidic silanols make this family of polymeric phases ideal for many biomolecule separations.

## POLYMERIC Cartridge Column Ordering Information

### HAICART

**PLRP-S 100Å 3µm**

### Stainless Steel Cartridge Columns

**3.2mm I.D. s.s. Cartridges**

20x3.2mm 5/pkg

PLF-0232-RP13

**PLRP-S 300Å 3µm**

**3.2mm I.D. s.s. Cartridges**

20x3.2mm 5/pkg

PLF-0232-RP33

**PL-SAX 1000Å 5µm**

**3.2mm I.D. s.s. Cartridges**

20x3.2mm 5/pkg

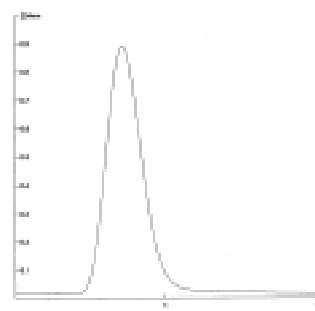
PLF-0232-AXK5

**PL-SCX 1000Å 5µm**

**3.2mm I.D. s.s. Cartridges**

20x3.2mm 5/pkg

PLF-0232-CXK5



**Symmetrical elution profile of a solute from a 2.5x0.5mm Piccolo used as a trap column:**

Polymer Labs PL-SCX 1000Å 5µm

P/N: PLP-M2M5-CXK5

1 µL loading of AMP solution eluted at 10 µL/min

### HAIPEEK

**PLRP-S 100Å 3µm**

**2.1mm I.D. PEEK Cartridges**

20x2.1mm 5/pkg 40x2.1mm 2/pkg 50x2.1mm 2/pkg

PLK-0221-RP13 PLK-0421-RP13 PLK-0521-RP13

**PLRP-S 300Å 3µm**

**2.1mm I.D. PEEK Cartridges**

20x2.1mm 5/pkg 40x2.1mm 2/pkg 50x2.1mm 2/pkg

PLK-0221-RP33 PLK-0421-RP33 PLK-0521-RP33

**PL-SAX 1000Å 5µm**

**2.1mm I.D. PEEK Cartridges**

20x2.1mm 5/pkg 40x2.1mm 2/pkg 50x2.1mm 2/pkg

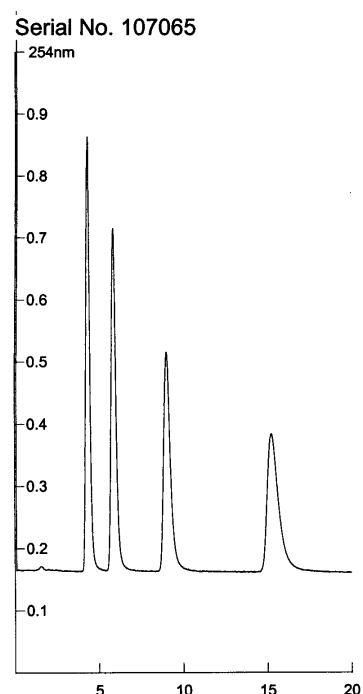
PLK-0221-AXK5 PLK-0421-AXK5 PLK-0521-AXK5

**PL-SCX 1000Å 5µm**

**2.1mm I.D. PEEK Cartridges**

20x2.1mm 5/pkg 40x2.1mm 2/pkg 50x2.1mm 2/pkg

PLK-0221-CXK5 PLK-0421-CXK5 PLK-0521-CXK5



**Test Chromatogram for a 150x0.3mm PLRP-S 100Å 3µm microbore column:**

P/N: PLS-15M3-RP13

(1) Methylparaben, (2) Ethylparaben,

(3) Propylparaben, (4) Butylparaben

50% MeCN/water, 5 µL/min



## POLYMERIC Column Ordering Information

PLRP-S  
PL-SAX  
PL-SCX

### Microbore Columns

<b>PLRP-S 100Å 3µm</b>	<b>1.0mm - 0.5mm - 0.3mm I.D.</b>			
30x1.0mm	50x1.0mm	100x1.0mm	150x1.0mm	250x1.0mm
PLS-0301-RP13	PLS-0501-RP13	PLS-1001-RP13	PLS-1501-RP13	PLS-2501-RP13
30x0.5mm	50x0.5mm	100x0.5mm	150x0.5mm	250x1.0mm
PLS-03M5-RP13	PLS-05M5-RP13	PLS-10M5-RP13	PLS-15M5-RP13	PLS-2501-RP13
30x0.3mm	50x0.3mm	100x0.3mm	150x0.3mm	250x0.3mm
PLS-03M3-RP13	PLS-05M3-RP13	PLS-10M3-RP13	PLS-15M3-RP13	PLS-25M3-C185

<b>PLRP-S 300Å 3µm</b>	<b>1.0mm - 0.5mm - 0.3mm I.D. (for 1000Å, 5µm use -RP1K)</b>			
30x1.0mm	50x1.0mm	100x1.0mm	150x1.0mm	250x1.0mm
PLS-0301-RP33	PLS-0501-RP33	PLS-1001-RP33	PLS-1501-RP33	PLS-2501-RP33
30x0.5mm	50x0.5mm	100x0.5mm	150x0.5mm	250x1.0mm
PLS-03M5-RP33	PLS-05M5-RP33	PLS-10M5-RP33	PLS-15M5-RP33	PLS-2501-RP33
30x0.3mm	50x0.3mm	100x0.3mm	150x0.3mm	250x0.3mm
PLS-03M3-RP33	PLS-05M3-RP33	PLS-10M3-RP33	PLS-15M3-RP33	PLS-25M3-RP33

<b>PL-SAX 1000Å 5µm</b>	<b>1.0mm - 0.5mm - 0.3mm I.D.</b>			
30x1.0mm	50x1.0mm	100x1.0mm	150x1.0mm	
PLS-0301-AXK5	PLS-0501-AXK5	PLS-1001-AXK5	PLS-1501-AXK5	
30x0.5mm	50x0.5mm			
PLS-03M5-AXK5	PLS-05M5-AXK5			
30x0.3mm	50x0.3mm			
PLS-03M3-AXK5	PLS-05M3-AXK5			

<b>PL-SCX 1000Å 5µm</b>	<b>1.0mm - 0.5mm - 0.3mm I.D.</b>			
30x1.0mm	50x1.0mm	100x1.0mm	150x1.0mm	
PLS-0301-CXK5	PLS-0501-CXK5	PLS-1001-CXK5	PLS-1501-CXK5	
30x0.5mm	50x0.5mm			
PLS-03M5-CXK5	PLS-05M5-CXK5			
30x0.3mm	50x0.3mm			
PLS-03M3-CXK5	PLS-05M3-CXK5			

### Capellini

<b>PLRP-S 100Å 3µm</b>	<b>150µm I.D.</b>			
30x0.150mm	50x0.150mm	100x0.150mm	150x0.150mm	250x0.150mm
PLC-0315-RP13	PLC-0515-RP13	PLC-1015-RP13	PLC-1515-RP13	PLC-2515-RP13

<b>PLRP-S 300Å 3µm</b>	<b>150µm I.D. (for PLRP-S 1000Å, 5µm use -RP1K)</b>			
30x0.150mm	50x0.150mm	100x0.150mm	150x0.150mm	250x0.150mm
PLC-0315-RP33	PLC-0515-RP33	PLC-1015-RP33	PLC-1515-RP33	PLC-2515-RP33

<b>PL-SAX 1000Å 5µm</b>	<b>150µm I.D.</b>
30x0.150mm	50x0.150mm
PLC-0315-AXK5	PLC-0515-AXK5

<b>PL-SCX 1000Å 5µm</b>	<b>150µm I.D.</b>
30x0.150mm	50x0.150mm
PLC-0315-CXK5	PLC-0515-CXK5

PLRP-S, PL-SAX, and PL-SCS are manufactured by Polymer Labs Ltd. For more information about these polymeric phases and other unique media and services, please refer to [www.polymerlabs.com](http://www.polymerlabs.com)



**Sprite**

PLRP-S 1000Å 3µm

PLRP-S 3000Å 3µm

PL-SAX 1000Å 5µm

PL-SCX 1000Å 5µm

**Direct Connect Sprite Columns:**

- 10x2.1 to 40x2.1mm sizes
- Fast HPLC analysis and ballistic gradients
- LC-MS Applications
- PEEK body and titanium frits
- Individually tested, Certificate of Analysis included

**Direct-Connect PEEK/Titanium HPLC Columns**

**Sprite HPLC Columns (for 1000Å, 5µm use -RP1K)**

10x2.1mm	20x2.1mm	40x2.1mm
PLR-0121-RP13	PLR-0221-RP13	PLR-0421-RP13

**Sprite HPLC Columns**

10x2.1mm	20x2.1mm	40x2.1mm
PLR-0121-RP33	PLR-0221-RP33	PLR-0421-RP33

**Sprite HPLC Columns**

10x2.1mm	20x2.1mm	40x2.1mm
PLR-0121-AXK5	PLR-0221-AXK5	PLR-0421-AXK5

**Sprite HPLC Columns**

10x2.1mm	20x2.1mm	40x2.1mm
PLR-0121-CXK5	PLR-0221-CXK5	PLR-0421-CXK5



**Short Microbore Columns:**

- 10x1.0 mm to 2.5x0.5mm sizes
- Trap column and fast LC-MS applications
- PEEK/titanium design
- 6-32 threads for capillary fittings
- Individually tested, Certificate of Analysis included

**Short PEEK Microbore Columns with Titanium Frits**

**Piccolo HPLC Columns (for 1000Å, 5µm use -RP1K)**

2.5x0.5mm	5x1.0mm	10x1.0mm
PLP-M2M5-RP13	PLP-M501-RP13	PLP-0101-RP13

**Piccolo HPLC Columns**

2.5x0.5mm	5x1.0mm	10x1.0mm
PLP-M2M5-RP33	PLP-M501-RP33	PLP-0101-RP33

**Piccolo HPLC Columns**

2.5x0.5mm	5x1.0mm	10x1.0mm
PLP-M2M5-AXK5	PLP-M501-AXK5	PLP-0101-AXK5

**Piccolo HPLC Columns**

2.5x0.5mm	5x1.0mm	10x1.0mm
PLP-M2M5-CXK5	PLP-M501-CXK5	PLP-0101-CXK5

**Piccolo**

PLRP-S 1000Å 3µm

PLRP-S 3000Å 3µm

PL-SAX 1000Å 5µm

PL-SCX 1000Å 5µm



For more information about Higgins Analytical Products, please ask your distributor, The Nest Group, Inc. for our catalog or from our web site [www.higanalyt.com](http://www.higanalyt.com)

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