

## Revive In-Line Sample Preparation: A Faster Approach for Multiresidue Pesticides in Food

- Automated, in-line sample extract cleanup dramatically reduces sample preparation time.
- Simultaneous analysis and ILSP cartridge wash eliminate downtime between samples.
- Fast, simple alternative to QuEChERS or SPE for multiresidue pesticides analysis in foods.



**Revive**  
IN-LINE SAMPLE PREPARATION

Streamlined Solutions,  
Reliable Resolutions

## Reliably Resolve Benzene and Toluene

Restek's new D3606 column set achieves accurate quantification of toluene and benzene—including benzene in gasoline containing ethanol or butanol—with no compromising coelutions.



## PEEK Support Set Up and Maintain Your HPLC System



# Parker Gas Generators from Restek



Parker domnick hunter hydrogen and nitrogen gas generators from Restek are the intelligent choice for use in Gas Chromatography.

Parker provides on-site, on-demand gas supply solutions, and offers a comprehensive range of analytical and industrial gas generation systems. All Parker gas generators provide simple “plug and play” installation, efficiently enabling a continuous or on-demand supply of consistently pure gas.

## **We also provide:**

- Installation, commissioning and operational training.
- Preventative maintenance kits for self-service.
- Preventative maintenance and breakdown service contract options.
- Breakdown service and repairs.

**For technical information or an online consultation, contact your local Restek representative or email [uksales@restek.com](mailto:uksales@restek.com)**

# Gas Sampling Bags

## Cost-Effective Alternatives for Air Sampling

- Ideal for whole air sampling at ppb-ppm levels.
- Tedlar, ALTEF, and multi-layer foil bags in a wide range of sizes.
- Extensive line of sampling accessories and replacement parts.

### Tedlar Sampling Bags

Dimensions	Volume	qty.	cat.#
<b>Polypropylene Valve and Septum Fitting</b>			
6" x 6"	0.5 L	10-pk.	22049
7" x 7"	1 L	10-pk.	22050
9.5" x 10"	3 L	10-pk.	22051
12" x 12.5"	5 L	10-pk.	22052
11.75" x 22"	10 L	10-pk.	22053
13" x 24"	12 L	10-pk.	22054
17.5" x 24"	25 L	5-pk.	22055
24" x 24.25"	40 L	5-pk.	22056
28.25" x 30.5"	80 L	5-pk.	22057
28" x 36"	100 L	3-pk.	22058

### Stainless Steel Push/Pull Valve & Septum Fitting

6" x 6"	0.5 L	10-pk.	27380
7" x 7"	1 L	10-pk.	27381
9.5" x 10"	3 L	10-pk.	27382
12" x 12.5"	5 L	10-pk.	27383
11.75" x 22"	10 L	10-pk.	27384
13" x 24"	12 L	10-pk.	27385
17.5" x 24"	25 L	5-pk.	27386
24" x 24.25"	40 L	5-pk.	27387
28.25" x 30.5"	80 L	3-pk.	27388
28" x 36"	100 L	3-pk.	27389

### Stainless Steel Push/Pull Valve Only

6" x 6"	0.5 L	10-pk.	27390
7" x 7"	1 L	10-pk.	27391
9.5" x 10"	3 L	10-pk.	27392
12" x 12.5"	5 L	10-pk.	27393
11.75" x 22"	10 L	5-pk.	27394
13" x 24"	12 L	5-pk.	27395
17.5" x 24"	25 L	5-pk.	27396
24" x 24.25"	40 L	5-pk.	27397
28.25" x 30.5"	80 L	3-pk.	27398
28" x 36"	100 L	3-pk.	27399

### ALTEF Gas Sampling Bags

Dimensions	Volume	qty.	cat.#
<b>Polypropylene Combo Valve and Septum</b>			
6" x 6"	0.5 L	10-pk.	22958
7" x 7"	1 L	10-pk.	22959
10" x 10"	3 L	10-pk.	22960
12" x 12"	5 L	10-pk.	22961
12" x 22"	10 L	10-pk.	22962
13" x 24"	12 L	10-pk.	26328
18" x 24"	25 L	5-pk.	22963
24" x 24.25"	40 L	5-pk.	26329
28.25" x 30.5"	80 L	3-pk.	26330
28" x 36"	100 L	3-pk.	26331

### Multi-Layer Foil Gas Sampling Bags

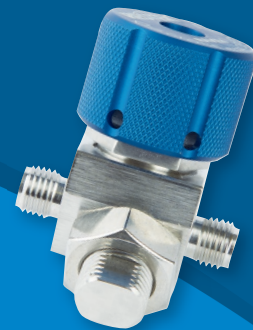
Dimensions	Volume	qty.	cat.#
<b>Polypropylene Combo Valve and Septum</b>			
7" x 7"	1 L	5-pk.	22950
10" x 10"	3 L	5-pk.	22951
12" x 12"	5 L	5-pk.	22952
12" x 22"	10 L	5-pk.	22953
13" x 24"	12 L	5-pk.	22966
18" x 24"	25 L	5-pk.	22967
24" x 24.5"	40 L	5-pk.	22968

[www.restek.com/air](http://www.restek.com/air)



## RAVEN Diaphragm Valves

For Entech air sampling canisters



- **Easy retrofit**—replace TOV and TOV-2 valves without modification!
- **Proven long life**—engineered to exceed 15,000 cycles.
- **Leak-free performance**—helium leak tested to  $1 \times 10^{-6}$  mL/sec.
- **Effortless operation**—finger turn for full valve closure (only 10 in-lb).

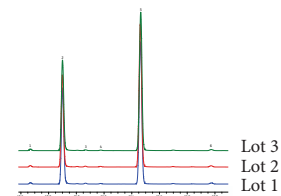
Description	Material	qty.	cat.#	Price £
1/4" Diaphragm Valve, RAVEn (2-Port)	Stainless Steel	ea.	27376	£321.05
	Siltek Treated	ea.	27377	£433.20
1/4" Diaphragm Valve, RAVEn (3-Port)	Stainless Steel	ea.	27378	£345.60
	Siltek Treated	ea.	27379	£460.80



## The Next Level of True Blue Reproducibility and Performance

- **Reproducibility**—unbeatable manufacturing controls and QC testing for superior reliability across compound classes.
- **Productivity**—unparalleled cleanliness for maximized GC uptime and lab throughput.
- **Deactivation**—unbelievably low breakdown for accurate and precise low-level GC analyses.

*You can expect the same great results from one lot to the next with Topaz GC inlet liners.*



### Featured Topaz Liners:

#### Agilent

Split Injection: 23305 | 23300  
Splitless Injection: 23303 | 23302

#### PerkinElmer

Split Injection: 23450 | 23449  
Splitless Injection: 23451

#### Sciex/Bruker/Varian

Split Injection: 23328  
Splitless Injection: 23332 | 23331

#### Shimadzu

Split Injection: 23319 | 23320  
Splitless Injection: 23336 | 23322

#### Thermo Scientific

Split Injection: 23444 | 23267  
Splitless Injection: 23447 | 23446

Learn more and find our full selection at [www.restek.com/topaz](http://www.restek.com/topaz)



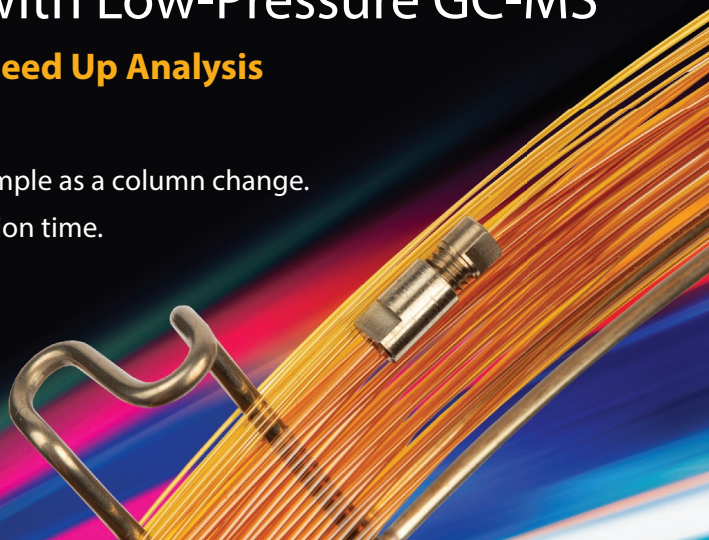
# Increase Sample Throughput with Low-Pressure GC-MS

## Leverage Your MS Vacuum to Significantly Speed Up Analysis

- 3x faster multiresidue pesticides analysis in foods.
- Factory-coupled, leak-free kit makes setting up LPGC as simple as a column change.
- Integrated transfer line reduces background and stabilization time.

Temp. Limits	Includes	cat.#	Price £
-60 to 340/340 °C	Factory-coupled restrictor column (5 m x 0.18 mm ID) and Rtx-5ms analytical column (15 m, 0.53 mm ID, 1 µm plus 1 m integrated transfer line on the outlet end)	11800	£720.40

Learn more at [www.restek.com/LPGC](http://www.restek.com/LPGC)



## Reliably Resolve Benzene and Toluene

Restek's new D3606 column set achieves accurate quantification of toluene and benzene—including benzene in gasoline containing ethanol or butanol—with no compromising coelutions.

### D3606 Application Column Set (packed, 2 column set)

Description	Column Config	Temp. Limits	cat.#	Price £
	General	up to 140 °C	83606A-800	£1,475.35
D3606	Agilent 6850	up to 140 °C	83606A-811	£1,475.35
Application	Bruker 430, 450, Varian 3800	up to 140 °C	83606A-821	£1,475.35
Column	Agilent	up to 140 °C	83606A-810	£1,475.35
(2 column set)	PE Auto Sys	up to 140 °C	83606A-840	£1,475.35
	Shimadzu 14A	up to 140 °C	83606A-850	£1,475.35

COLUMN CONFIGURATION KEY: -800 General—General Configuration; -810 Agilent—(HP) 5880, 5890, 5987, 6890, 7980; -811 Agilent 6850; -821 Bruker 430, 450, Varian 3800; -840 PE Auto Sys—PE Auto System 8300/8400/8700, Clarus 500; -850 Shimadzu 14A—Shimadzu 14A, 2014.

Other column configurations available.



## Ensure Accurate, Reliable GC Analysis of Triglycerides in Edible Oils

- High-temperature stability ensures consistent results and longer column lifetimes.
- Separate and quantify critical triglycerides without interference from column bleed.
- Observe even underivatized mono- and diglycerides.

### Rxi-65TG Columns (fused silica)

High-polarity Crossbond phase

ID	df	Length	Temp. Limits	cat.#/ea.	Price £
0.25 mm	0.10 µm	15 m	40 to 370 °C	17105	£629.50
	0.10 µm	25 m	40 to 370 °C	17107	£809.35
	0.10 µm	30 m	40 to 370 °C	17108	£818.15
0.32 mm	0.10 µm	15 m	40 to 370 °C	17106	£638.30
	0.10 µm	25 m	40 to 370 °C	17110	£818.15
	0.10 µm	30 m	40 to 370 °C	17109	£826.95



Labs on the forefront of food quality and authenticity require analytical columns that reliably generate accurate, precise data. With best-in-class thermal stability up to 370 °C, Rxi-65TG columns are the top-performing column for the analysis of triglycerides in edible oils.



## Thermolite Plus and BTO Septa

### Preconditioned and GC-FID Tested Septa Packaged in Ultra-Clean Blister Packs

- Plasma coating eliminates sticking in the injection port.
- Precision molding ensures consistent, accurate fit.
- Preconditioned and ready to use.

### Thermolite Plus Septa

- Usable to 350 °C inlet temperature.\*
- Ultra-low bleed minimizes background signal.

Diameter	qty.	cat.#	Price £
5 mm (3/16"), with CenterGuide, predrilled	50-pk.	23860	£76.70
9 mm, with CenterGuide	50-pk.	23862	£76.70
9.5 mm (3/8")	50-pk.	23877	£76.70
10 mm	50-pk.	23878	£76.70
Shimadzu Plug	50-pk.	23872	£76.70
11 mm (7/16"), with CenterGuide	50-pk.	23864	£76.70
11.5 mm, with CenterGuide	50-pk.	23866	£76.70
12.7 mm (1/2"), with CenterGuide	48-pk.	23868	£77.60
17 mm, with CenterGuide	48-pk.	23870	£98.75

\*For 17 mm inlets, the maximum temperature for Thermolite Plus septa is 300 °C.

### Premium Non-Stick BTO Septa

- Usable to 400 °C inlet temperature.\*
- Bleed and temperature optimized; ideal for demanding GC and GC-MS applications.

Diameter	qty.	cat.#	Price £
9 mm, with CenterGuide	50-pk.	27084	£101.00
9.5 mm (3/8")	50-pk.	27086	£101.00
10 mm	50-pk.	27088	£101.00
Shimadzu Plug	50-pk.	27098	£124.30
11 mm (7/16"), with CenterGuide, predrilled	50-pk.	27090	£101.00
12.7 mm (1/2"), with CenterGuide**	50-pk.	27094	£101.00
17 mm, with CenterGuide	50-pk.	27096	£124.30

\*For 17 mm inlets, the maximum temperature for BTO septa is 330 °C. For all injectors, minimum recommended operating temperature for BTO septa is 250 °C.

\*\*12.7 mm and 17 mm septa packaged in precleaned glass jars.

Note: Due to differences in inlet design, the actual septum temperature for a given inlet set point can vary by manufacturer. Restek recommends using only BTO septa in older Thermo TRACE and Focus GCs. For Thermo TRACE 1300/1310 GCs, this recommendation does not apply; septa can be used to their maximum recommended temperature.

Visit [www.restek.com/septa](http://www.restek.com/septa) to order.

## NEW Siltek-Treated MXT Guard/Retention Gap/Transfer Lines

Ideal for most high-temperature applications and solvents



### Siltek-Treated MXT Guard/Retention Gap Columns/Transfer Lines (passivated stainless steel)

ID	Length	qty.	cat.#	Price £
0.28 mm	5 m	ea.	70026	£151.80
	10 m	ea.	70036	£227.10
	15 m	ea.	70056	£279.55
	30 m	ea.	70066	£454.15
0.53 mm	5 m	ea.	70028	£174.60
	10 m	ea.	70038	£238.50
	15 m	ea.	70058	£302.40
	30 m	ea.	70068	£523.75

## Quick and Easy Tool-free GC Column Installation

For Shimadzu 17A, 2010, 2014, and 2030 GCs

- Provides a leak-free seal for all applications.
- Siltek-treated version available for increased inertness.
- Meets or exceeds original manufacturer's performance.

### Tool-free GC Column Installation Kit

Description	Includes	cat.#	Price £
Tool-free GC Column Installation Kit	inlet adaptor, retaining nut, back washer, and hot swap column nut	27220	£72.00
Tool-free GC Column Installation Kit (Siltek Treated)	Siltek-treated inlet adaptor, retaining nut, back washer, and hot swap column nut	27221	£76.00



# Certified Reference Materials (CRMs) for Cannabis Analysis



## Oregon Pesticide Standards (6 separate mixes)

Conc. in Solvent	CRM?	Min Shelf Life on Ship Date	Max Shelf Life on Ship Date	Shipping Conditions	Storage Temp.	qty.	cat.#	Price £
<b>Oregon Pesticide Standard #1</b>								
600 µg/mL, Acetonitrile, 1 mL/ampul	Yes	6 months	18 months	Ambient	-20 °C or colder	ea.	32586	£38.05
<b>Oregon Pesticide Standard #2</b>								
600 µg/mL, Acetonitrile, 1 mL/ampul	Yes	6 months	18 months	Ambient	-20 °C or colder	ea.	32587	£208.55
<b>Oregon Pesticide Standard #3</b>								
600 µg/mL, Acetonitrile, 1 mL/ampul	Yes	6 months	18 months	Ambient	10 °C or colder	ea.	32588	£87.60
<b>Oregon Pesticide Standard #4</b>								
600 µg/mL, Acetonitrile, 1 mL/ampul	Yes	6 months	18 months	Ambient	10 °C or colder	ea.	32589	£95.65
<b>Oregon Pesticide Standard #5</b>								
600 µg/mL, Acetonitrile, 1 mL/ampul	Yes	6 months	18 months	Ambient	10 °C or colder	ea.	32590	£150.95
<b>Oregon Pesticide Standard #6</b>								
600 µg/mL, Acetonitrile, 1 mL/ampul	Yes	6 months	14 months	Ambient	10 °C or colder	ea.	32591	£71.45

## California Pesticide Standards (6 separate mixes)

Conc. in Solvent	CRM?	Min Shelf Life on Ship Date	Max Shelf Life on Ship Date	Shipping Conditions	Storage Temp.	qty.	cat.#	Price £
<b>California Pesticide Standard #1</b>								
100 µg/mL, Acetonitrile, 1mL/ampul	Yes	6 months	14 months	On ice	-20 °C or colder	ea.	34124	£102.55
<b>California Pesticide Standard #2</b>								
100 µg/mL, Acetonitrile, 1mL/ampul	Yes	6 months	24 months	Ambient	-20 °C or colder	ea.	34125	£114.05
<b>California Pesticide Standard #3</b>								
100 µg/mL, Acetonitrile, 1mL/ampul	Yes	6 months	24 months	Ambient	-20 °C or colder	ea.	34126	£91.05
<b>California Pesticide Standard #4</b>								
100 µg/mL, Acetonitrile, 1mL/ampul	Yes	6 months	24 months	Ambient	0 °C or colder	ea.	34127	£91.05
<b>California Pesticide Standard #5</b>								
100 µg/mL, Acetonitrile, 1mL/ampul	Yes	6 months	24 months	Ambient	-20 °C or colder	ea.	34128	£91.05
<b>California Pesticide Standard #6</b>								
100 µg/mL, Acetonitrile, 1mL/ampul	Yes	6 months	24 months	Ambient	-20 °C or colder	ea.	34129	£124.45

## Residual Solvents #1 (20 components)

Conc. in Solvent	CRM?	Min Shelf Life on Ship Date	Max Shelf Life on Ship Date	Shipping Conditions	Storage Temp.	qty.	cat.#	Price £
3000 µg/mL in N,N-Dimethylacetamide, 1 mL/ampul	Yes	6 months	45 months	Ambient	10 °C or colder	ea.	34105	£130.20

## Aflatoxins (B1, B2, G1, G2) Standard (4 components)

Conc. in Solvent	CRM?	Min Shelf Life on Ship Date	Max Shelf Life on Ship Date	Shipping Conditions	Storage Temp.	Data pack available?	qty.	cat.#	Price £
10 µg/mL, Acetonitrile, 1 mL/ampul	Yes	6 months	36 months	On Ice	0 °C or colder	No	ea.	34121	£392.30

## Ochratoxin A Standard

Description	CAS #	Conc. in Solvent	CRM?	Min Shelf Life on Ship Date	Max Shelf Life on Ship Date	Shipping Conditions	Storage Temp.	Data pack available?	qty.	cat.#	Price £
Ochratoxin A	303-47-9	10 µg/mL, Acetonitrile, 1 mL/ampul	Yes	6 months	36 months	On Ice	0 °C or colder	No	ea.	34122	£186.65



## 10 Critical Steps to World Class Reference Standards

Whether it's a stock, off-the-shelf reference standard or a one-of-a-kind, custom-formulated solution, there are 10 critical steps that Restek takes to separate our reference standards from the competition: [www.restek.com/10steps](http://www.restek.com/10steps)



# Streamline Cannabinoid Analyses

**9 Cannabinoids.**  
**1000 µg/mL Concentration.**  
**1 Ampul.**

## Cannabinoid Neutrals Mix (9 components)

Conc. in Solvent	CRM?	DEA Status	Canadian Test Kit Registration	Min Shelf Life on Ship Date	Max Shelf Life on Ship Date	Shipping Conditions	Storage Temp.	cat.#/ ea.	Price £
1000 µg/mL, P&T Methanol, 1 mL/ampul	Yes	Exempt	C.T.K.# 003-004	6 months	24 months	On Ice	-20 °C or colder	34132	£695.90



Cannabichromene (CBC)  
Cannabicyclol (CBL)  
Cannabidiol (CBD)  
Cannabidivarin (CBDV)  
Cannabigerol (CBG)  
Cannabinol (CBN)  
d8-Tetrahydrocannabinol (d8-THC)  
d9-Tetrahydrocannabinol (d9-THC)  
Tetrahydrocannabivarin (THCV)

## Reference Standards for Terpenes Profiling Analysis

- Formulated to contain the major terpenes analyzed by cannabis labs.
- Prepared in two separate multicomponent mixes to maximize stability.
- Comprehensive blends minimize time spent preparing standards for marijuana analysis.
- High concentration (2500 µg/mL) solutions provide value and maximize flexibility.

### Cannabis Terpenes Standard #1

(19 components)

Conc. in Solvent	CRM?	Min Shelf Life on Ship Date	Max Shelf Life on Ship Date	Shipping Conditions	Storage Temp.	qty.	cat.#	Price £
2500 µg/mL each in isopropanol, 1 mL/ampul	Yes	6 months	24 months	Ambient	0 °C or colder	ea.	34095	£263.85

### Cannabis Terpenes Standard #2

(2 components)

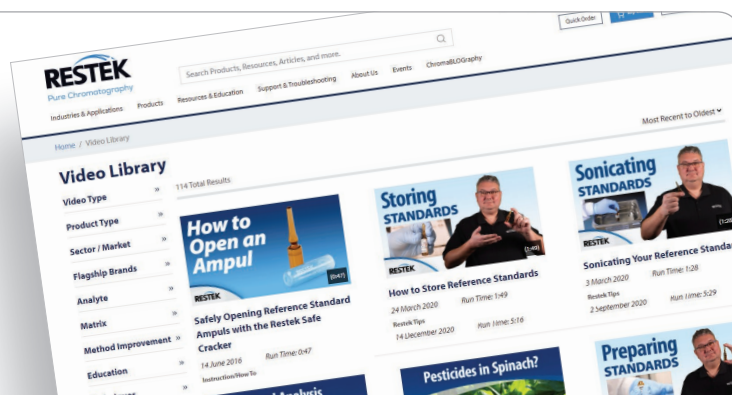
Conc. in Solvent	CRM?	Min Shelf Life on Ship Date	Max Shelf Life on Ship Date	Shipping Conditions	Storage Temp.	qty.	cat.#	Price £
2500 µg/mL each in isopropanol, 1 mL/ampul	Yes	6 months	24 months	Ambient	0 °C or colder	ea.	34096	£48.40

Expanded-list terpenes  
MegaMix reference  
standards available  
September 2021!



## How to... Reference Standards

Find out how to safely open, prepare, store, and sonicate your reference standards. These tips and more are a click away at [www.restek.com/videos](http://www.restek.com/videos)



# Raptor

LC Columns

Selectivity Accelerated



## Put Raptor LC columns and guards to the test today on your most challenging workflows.

### Raptor Polar X: Revolutionizing the LC Analysis of Polar Compounds

Poor retention, low response, complex sample preparation procedures...the analysis of polar compounds historically has posed challenges to both data quality and lab productivity. Now, Raptor Polar X columns—with their novel phase chemistry that blends HILIC and ion-exchange retention on a single ligand—significantly simplify the analysis of these difficult and varied compounds.



#### Raptor Polar X LC Columns

ID	Length	qty.	cat.#
2.1 mm	30 mm	ea.	9311A32
	50 mm	ea.	9311A52
	100 mm	ea.	9311A12

#### Raptor EXP Guard Column Cartridges

Description	Particle Size	Size	cat.#/3-pk.
Raptor Polar X EXP Guard Column Cartridge	2.7 µm	5 x 2.1 mm	9311A0252 <b>NEW!</b>

### Rugged, MS-Friendly Raptor HILIC-Si Phase

Simplify the switch to HILIC with dependable results on both HPLC and UHPLC systems.

- Retain polar compounds without ion-pairing reagents.
- 2.7 µm Raptor core-shell particles provide the speed of SPP.
- Ideal for increasing sensitivity and selectivity in LC-MS analyses.

#### Raptor HILIC-Si LC Columns (USP L3)

ID	Length	cat.#/ea.	ID	Length	cat.#/ea.	ID	Length	cat.#/ea.
2.1 mm	30 mm	9310A32	3.0 mm	50 mm	9310A5E	4.6 mm	50 mm	9310A55
	50 mm	9310A52		100 mm	9310A1E		100 mm	9310A15
	100 mm	9310A12		150 mm	9310A6E		150 mm	9310A65
	150 mm	9310A62						

#### Raptor EXP Guard Column Cartridges

Description	Particle Size	Size	qty.	cat.#
Raptor HILIC-Si EXP Guard Column Cartridge	2.7 µm	5 x 2.1 mm	3-pk.	9310A0252
	2.7 µm	5 x 3.0 mm	3-pk.	9310A0253
	2.7 µm	5 x 4.6 mm	3-pk.	9310A0250

### Raptor FluoroPhenyl—Get the Power of HILIC and RP Modes in One LC Column

Reversed-phase (RP) analysis on a C18 column is a common approach, but it isn't always the best strategy. You can do more with a Raptor FluoroPhenyl LC column—a rugged, reliable fluorinated phenyl that allows you to operate with confidence in either HILIC or RP mode.

#### Raptor FluoroPhenyl LC Columns (USP L43)

ID	Length	cat.#/ea.	ID	Length	cat.#/ea.
<b>1.8 µm Particles</b>					
2.1 mm	30 mm	9319232	4.6 mm	30 mm	9319A35
	50 mm	9319252		50 mm	9319A55
	100 mm	9319212		100 mm	9319A15
	150 mm	9319262		150 mm	9319A65
3.0 mm	50 mm	931925E	<b>5 µm Particles</b>		
	100 mm	931921E	2.1 mm	50 mm	9319552
<b>2.7 µm Particles</b>			2.1 mm	100 mm	9319512
2.1 mm	30 mm	9319A32		150 mm	9319562
	50 mm	9319A52		30 mm	931953E
	100 mm	9319A12	3.0 mm	50 mm	931955E
	150 mm	9319A62		100 mm	931951E
3.0 mm	30 mm	9319A3E		150 mm	931956E
	50 mm	9319A5E	4.6 mm	50 mm	9319555
	100 mm	9319A1E		100 mm	9319515
	150 mm	9319A6E		150 mm	9319565
				250 mm	9319575

#### Raptor EXP Guard Column Cartridges

Description	Particle Size	Size	cat.#/3-pk.
Raptor FluoroPhenyl EXP Guard Column Cartridge	UHPLC	5 x 2.1 mm	9319U0252
	UHPLC	5 x 3.0 mm	9319U0253
Raptor FluoroPhenyl EXP Guard Column Cartridges	2.7 µm	5 x 2.1 mm	9319A0252
	2.7 µm	5 x 3.0 mm	9319A0253
	2.7 µm	5 x 4.6 mm	9319A0250

Raptor EXP Guard Column Cartridges Maximum cartridge pressure: 1034 bar/15,000 psi\* (UHPLC), 600 bar/8700 psi (2.7 µm); 400 bar/5800 psi (5 µm). \* For maximum lifetime, recommended maximum pressure for UHPLC particles is 830 bar/12,000 psi. Intellectual Property: [optimizetech.com/patents](http://optimizetech.com/patents)





## Revive In-Line Sample Preparation: A Faster Approach for Multiresidue Pesticides in Food

Reduce sample prep time, money spent on disposable products, and errors from manual work by integrating Revive ILSP into your current methods for multiresidue pesticides in foods.

Description	qty.	cat.#	Price £
Revive ILSP holder for 5 mm cartridge	ea.	27880	£139.50
Revive ILSP Pesticides cartridge (5 x 2.1 mm)	ea.	27881	£217.00
Revive ILSP holder and Revive ILSP Pesticides cartridge (5 x 2.1 mm)	kit	27882	£325.50
Revive ILSP Pesticides cartridges (5 x 2.1 mm)	3-pk.	27883	£607.60

Learn more at [www.restek.com/Revive](http://www.restek.com/Revive)

**Revive**  
IN-LINE SAMPLE PREPARATION



## EXP Holders

To help protect your investment and further extend the life of our already-rugged LC columns, Restek offers the patent-pending guard column hardware developed by Optimize Technologies.

### EXP Direct Connect Holder

For dilute-and-shoot or other minimal sample preparation techniques, use a Restek LC guard cartridge in an EXP direct connect holder. Free-Turn architecture lets you change cartridges by hand without breaking inlet/outlet fluid connections.

Description	qty.	cat.#	Price £
EXP Direct Connect Holder for EXP Guard Cartridges (includes hex-head fitting & 2 ferrules)	ea.	25808	£411.70

### EXP In-Line Holder

For online trapping and preconcentration techniques, use a Restek LC guard cartridge in an EXP in-line holder. Connects to any HPLC, UHPLC, injection, or switching valves with 1/16" stainless-steel tubing.

Description	qty.	cat.#	Price £
EXP In-Line Holder for EXP Guard Cartridges (includes hex-head fittings & 2 ferrules)	ea.	25751	477.65

Intellectual Property: [optimizetech.com/patents](http://optimizetech.com/patents)



## EXP2 TI-LOK All-in-One (AIO) Reusable Fittings for HPLC & UHPLC

*Integrated ferrule simplifies installation—no more lost ferrules*

Description	qty.	cat.#	Price £
EXP2 TI-LOK All-in-One (AIO) Hand-Tight Fitting with Integral Ferrule (includes built-in driver) for 10-32 fittings and 1/16" tubing	ea.	25745	£80.40
	10-pk.	25746	£752.20

Intellectual Property: [optimizetech.com/patents](http://optimizetech.com/patents)

Integrated Ferrule



Titanium provides durability.

PEEK tips reseal easily and reliably.



Learn more at [www.restek.com/EXP](http://www.restek.com/EXP)

# PEEK Support

## Set Up and Maintain Your HPLC System

**HPLC PEEK Performance Kit**—a useful complement to your HPLC system.

Description	qty.	cat.#	Price £
HPLC PEEK Performance Kit	kit	26394	£217.00

**Survival Kit for HPLC, PEEK**—an invaluable parts kit that contains essentials for setting up and maintaining your HPLC system.

Description	qty.	cat.#	Price £
Survival Kit for HPLC	kit	25322	£401.60

\*Kit contains 1 wrench, replacement (cat.# 20110) is a 2-pk.

### PEEK Unions, Tees, and Crosses for HPLC

One-piece, finger-tight fittings—no ferrules required.

Description	Material	Max Pressure	Union Bore	qty.	cat.#	Price £
Union	PEEK	5000 psi (350 bar)	0.25 mm	2-pk.	27715	£30.95
	PEEK	5000 psi (350 bar)	0.50 mm	2-pk.	27716	£30.95
	PEEK	5000 psi (350 bar)	0.75 mm	2-pk.	27717	£30.95
Tee	PEEK	5000 psi (350 bar)	0.25 mm	ea.	27718	£85.70
	PEEK	5000 psi (350 bar)	0.50 mm	ea.	27719	£85.70
	PEEK	5000 psi (350 bar)	0.75 mm	ea.	27720	£85.70
Cross	PEEK	5000 psi (350 bar)	0.25 mm	ea.	27721	£100.00
	PEEK	5000 psi (350 bar)	0.50 mm	ea.	27722	£100.00
	PEEK	5000 psi (350 bar)	0.75 mm	ea.	27723	£100.00

**PEEK Tubing**—ideal for plumbing to and inside HPLC systems.

Description	Color	ID	OD	Length	Max Pressure	qty.	cat.#	Price £
PEEK Tubing	Natural	0.0025"	1/16"	1 m	7000 psi	3-pk.	27746	£61.90
	Red Stripe	0.005"	1/16"	3 m	7000 psi	ea.	27747	£38.10
	Red Stripe	0.005"	1/16"	10 m	7000 psi	ea.	27748	£108.30
	Yellow Stripe	0.007"	1/16"	3 m	7000 psi	ea.	27749	£38.10
	Yellow Stripe	0.007"	1/16"	10 m	7000 psi	ea.	27750	£108.30
	Blue Stripe	0.010"	1/16"	3 m	5000 psi	ea.	27751	£38.10
	Blue Stripe	0.010"	1/16"	10 m	5000 psi	ea.	27752	£108.30
	Orange Stripe	0.020"	1/16"	3 m	5000 psi	ea.	27753	£38.10
	Orange Stripe	0.020"	1/16"	10 m	5000 psi	ea.	27754	£108.30
	Green Stripe	0.030"	1/16"	3 m	5000 psi	ea.	27755	£34.55
	Green Stripe	0.030"	1/16"	10 m	5000 psi	ea.	27756	£95.20

### PEEK Column Couplers

Connect two columns, a guard holder to a column, or inline sample prep holders.

Description	Color	Material	Max Pressure	Union Bore	qty.	cat.#	Price £
Column Coupler	Red	PEEK	5000 psi (350 bar)	0.13 mm	ea.	27724	£32.15
	Yellow	PEEK	5000 psi (350 bar)	0.17 mm	ea.	27725	£32.15
	Blue	PEEK	5000 psi (350 bar)	0.25 mm	ea.	27726	£32.15

### Universal 10-32 PEEK Column Connectors and Plugs

Allow easy installation of all 1/16" tubing, including stainless steel, up to 5,000 psi (350 bar).

Description	qty.	cat.#	Price £
PEEK Column Connector (beige, round body)	10-pk.	25015	£56.95
PEEK Column Plug (black)	10-pk.	25016	£48.50
PEEK Finger-Tight Fittings (blue, flat-sided)	10-pk.	27710	£40.35
	25-pk.	27711	£90.75

### Clean-Cut Tubing Cutter

Burr-free, perpendicular cuts that will not distort the tubing OD or close the ID.

Description	qty.	cat.#	Price £
Clean-Cut Tubing Cutter	ea.	25069	£55.90



## Filtration with Just a Squeeze of Your Fingers, Chosen in a Snap

Switching over to fast, eco-friendly Thomson SINGLE StEP filter vials is easy with our compatibility chart featuring over 80 solvents/mobile phases. Simply visit [www.restek.com/singlestep](http://www.restek.com/singlestep), select a filter vial, then click on the convenient link to determine which filter vial will work best for your application.

Also available in eXtreme, low-evaporation, and nano versions at [www.restek.com/singlestep](http://www.restek.com/singlestep)



### Thomson SINGLE StEP Standard Filter Vials

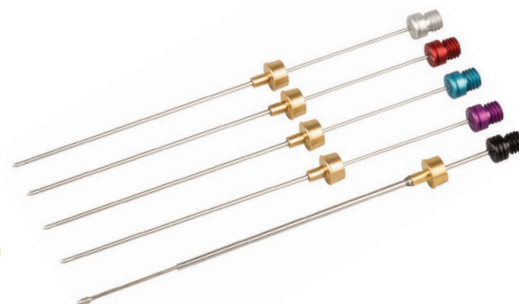
Porosity	Color	qty.	cat.#
<b>Nylon</b>			
0.2 µm	black preslit cap	100-pk.	25891
0.45 µm	pink preslit cap	100-pk.	25892
<b>PES (polyethersulfone)</b>			
0.2 µm	grey preslit cap	100-pk.	25897
<b>PTFE (polytetrafluoroethylene)</b>			
0.2 µm	green preslit cap	100-pk.	25893
0.45 µm	blue preslit cap	100-pk.	25894
<b>PVDF (polyvinylidene fluoride)</b>			
0.2 µm	red preslit cap	100-pk.	25895
0.45 µm	yellow preslit cap	100-pk.	25896

Patent No. 7,790,117

## Set Your Sights on Superior Performance with Restek PAL SPME Arrow

- Rugged, stainless-steel construction ensures longer lifetimes.
- Faster extraction means higher sample throughput.
- Better sensitivity allows lower LODs.

Go to [www.restek.com/SPME](http://www.restek.com/SPME) for caps, septa, and more!



### Restek PAL SPME Arrow

Description	Color	Diameter	Material	Recommended Analytes	qty.	cat.#	Price £
SPME Arrow	Red	1.1 mm	100 µm Polydimethylsiloxane (PDMS)	Volatile, 60–275 g/mol*	ea.	27485	£401.80
	Red	1.5 mm wide sleeve	100 µm Polydimethylsiloxane (PDMS)	Volatile, 60–275 g/mol*	ea.	27877 <b>NEW!</b>	£454.80
	Black	1.5 mm	250 µm Polydimethylsiloxane (PDMS)	Volatile, 60–275 g/mol (high capacity)*	ea.	27484	£401.80
	Gray	1.1 mm	100 µm Polyacrylate	Polar, semivolatile, 80–300 g/mol*	ea.	27488	£401.80
	Light Blue	1.1 mm	120 µm Carbon Wide Range (WR)/PDMS	Highly volatile, 30–225 g/mol*	ea.	27487	£401.80
	Light Blue	1.5 mm wide sleeve	120 µm Carbon Wide Range (WR)/PDMS	Highly volatile, 30–225 g/mol*	ea.	27879 <b>NEW!</b>	£454.80
	Violet	1.1 mm	120 µm Divinylbenzene (DVB)/PDMS	Aromatic and polar compounds, 60–300 g/mol*	ea.	27486	£401.80
	Violet	1.5 mm wide sleeve	120 µm Divinylbenzene (DVB)/PDMS	Aromatic semivolatile, 60–300 g/mol*	ea.	27878 <b>NEW!</b>	£454.80
	Dark Gray	1.1 mm	120 µm DVB/Carbon WR/PDMS	Volatile and semivolatile, 40–275 g/mol*	ea.	27875 <b>NEW!</b>	£391.55
	Dark Gray	1.5 mm wide sleeve	120 µm DVB/Carbon WR/PDMS	Volatile and semivolatile, 40–275 g/mol*	ea.	27876 <b>NEW!</b>	£454.80
SPME Arrow Method Development Kit	Includes: one SPME arrow each: 1.1 mm PDMS 100 µm, 1.5 mm PDMS 250 µm, 1.1 mm PA 100 µm, 1.1 mm Carbon WR/PDMS 120 µm, 1.1 mm DVB/PDMS 120 µm				Set of 5	27489	£1,717.75

\*These molecular weight ranges are a reasonable approximation; however, end users should verify suitability for their specific application.

## Resprep VM-96 Vacuum Manifold

Designed by Restek with these simple things in mind...

- Performance
- Ergonomics
- Versatility
- Accuracy

Perfect for everyday SPE, SLE, PPT & filtration applications.

Description	qty.	cat.#	Price £
Resprep VM-96 vacuum manifold	ea.	25858	£1,385.10



## Resprep Polymeric SPE Offers an Alternative to Silica-Based Sorbents.

- No unwanted silica interactions.
- Higher loading capacity.
- Stable over a wide pH range (0–14).



Description	Packing	Particle Size	Recommended Analytes	Volume	qty.	cat.#	Price £
Resprep Polymeric SPE 96-Well Plate	HLB	30 µm	General-purpose for acids, bases, or neutrals; high capacity for polar compounds.	10 mg	ea.	28453 <b>NEW!</b>	£299.85
	HLB	30 µm	General-purpose for acids, bases, or neutrals; high capacity for polar compounds.	30 mg	ea.	28454 <b>NEW!</b>	£299.85
Resprep Polymeric SPE Cartridge	HLB	30 µm	General-purpose for acids, bases, or neutrals; high capacity for polar compounds.	1 mL, 30 mg	100-pk.	28449 <b>NEW!</b>	£181.55
	HLB	60 µm	General-purpose for acids, bases, or neutrals; high capacity for polar compounds.	3 mL, 60 mg	50-pk.	28450 <b>NEW!</b>	£157.75
	HLB	60 µm	General-purpose for acids, bases, or neutrals; high capacity for polar compounds.	6 mL, 200 mg	30-pk.	28451 <b>NEW!</b>	£181.55
	HLB	60 µm	General-purpose for acids, bases, or neutrals; high capacity for polar compounds.	6 mL, 500 mg	30-pk.	28452 <b>NEW!</b>	£207.60
Resprep Polymeric SPE 96-Well Plate	MAX	30 µm	Acids	10 mg	ea.	28459 <b>NEW!</b>	£299.85
	MAX	30 µm	Acids	30 mg	ea.	28460 <b>NEW!</b>	£299.85
	MAX	30 µm	Acids	1 mL, 30 mg	100-pk.	28455 <b>NEW!</b>	£225.45
Resprep Polymeric SPE Cartridge	MAX	60 µm	Acids	3 mL, 60 mg	50-pk.	28456 <b>NEW!</b>	£157.75
	MAX	60 µm	Acids	6 mL, 150 mg	30-pk.	28457 <b>NEW!</b>	£181.55
	MAX	60 µm	Acids	6 mL, 500 mg	30-pk.	28458 <b>NEW!</b>	£236.60
Resprep Polymeric SPE 96-Well Plate	MCX	30 µm	Bases	10 mg	ea.	28465 <b>NEW!</b>	£229.85
	MCX	30 µm	Bases	30 mg	ea.	28466 <b>NEW!</b>	£229.85
	MCX	30 µm	Bases	1 mL, 30 mg	100-pk.	28461 <b>NEW!</b>	£225.45
Resprep Polymeric SPE Cartridge	MCX	60 µm	Bases	3 mL, 60 mg	50-pk.	28462 <b>NEW!</b>	£157.75
	MCX	60 µm	Bases	6 mL, 150 mg	30-pk.	28463 <b>NEW!</b>	£181.55
	MCX	60 µm	Bases	6 mL, 500 mg	30-pk.	28464 <b>NEW!</b>	£236.60
Resprep Polymeric SPE 96-Well Plate	WAX	30 µm	Strong acids	10 mg	ea.	28471 <b>NEW!</b>	£229.85
	WAX	30 µm	Strong acids	30 mg	ea.	28472 <b>NEW!</b>	£229.85
	WAX	30 µm	Strong acids	1 mL, 30 mg	100-pk.	28467 <b>NEW!</b>	£225.45
	WAX	60 µm	Strong acids	3 mL, 60 mg	50-pk.	28468 <b>NEW!</b>	£157.75
Resprep Polymeric SPE Cartridge	WAX	60 µm	Strong acids	6 mL, 150 mg	30-pk.	28469 <b>NEW!</b>	£181.55
	WAX	30 µm	Strong acids	6 mL, 200 mg	30-pk.	28292	£305.65
	WAX	30 µm	Strong acids	6 mL, 500 mg	30-pk.	28291	£393.65
	WAX	60 µm	Strong acids	6 mL, 500 mg	30-pk.	28470 <b>NEW!</b>	£236.60
Resprep Polymeric SPE 96-Well Plate	WCX	30 µm	Strong bases	10 mg	ea.	28477 <b>NEW!</b>	£299.85
	WCX	30 µm	Strong bases	30 mg	ea.	28478 <b>NEW!</b>	£299.85
	WCX	30 µm	Strong bases	1 mL, 30 mg	100-pk.	28473 <b>NEW!</b>	£225.45
Resprep Polymeric SPE Cartridge	WCX	60 µm	Strong bases	3 mL, 60 mg	50-pk.	28474 <b>NEW!</b>	£157.75
	WCX	60 µm	Strong bases	6 mL, 200 mg	30-pk.	28475 <b>NEW!</b>	£181.55
	WCX	60 µm	Strong bases	6 mL, 500 mg	30-pk.	28476 <b>NEW!</b>	£236.60

HLB – Hydrophilic-Lipophilic Balance; MAX – Mixed-Mode, Strong Anion Exchange; MCX – Mixed-Mode, Strong Cation Exchange; WAX – Mixed-Mode, Weak Anion Exchange; WCX – Mixed-Mode, Weak Cation Exchange

Resprep polymeric SPE products offer five distinct packings to choose from. Find them all, and the entire line of Resprep sample preparation products, at [www.restek.com/resprep](http://www.restek.com/resprep)