## **Survival Kits**



PEEK™ Survival Kit



**Terry Reid**Technical Service
Specialist
9+ years of service!

#### **PEEK™ Survival Kit for HPLC**

The PEEK™ Survival Kit is an invaluable parts kit that contains tubing, fittings, and tools essential for setting up and maintaining your HPLC system: PEEK™ tubing, connectors, and elbows, Teflon® tubing, a tubing cutter and extra blades, a ValvTool wrench, open-end wrenches, and more.

#### For start-up and maintenance in all HPLC systems.

Description	qty.	cat.#	
PEEK™ Survival Kit for HPLC	kit	25322	
Contents:			
Description	qty.	cat.#	
PEEK™ Column Connector (beige, round body)	10-pk.	25015	
PEEK <sup>TM</sup> Tubing, <sup>1</sup> / <sub>16</sub> " OD x 0.005" ID x 3m (red stripe)	ea.	25065	
PEEK <sup>TM</sup> Tubing, <sup>1</sup> / <sub>16</sub> " OD x 0.007" ID x 3m (yellow stripe)	ea.	25066	
PEEK <sup>TM</sup> Tubing, 1/16" OD x 0.010" ID x 3m (blue stripe)	ea.	25067	
PEEK™ Tubing Elbow 90°	5-pk.	25308	
PEEK™ Tubing Elbow 180°	5-pk.	25309	
Teflon® Tubing, 1/8" OD x 0.063" ID x 3m (1.6mm ID)	3m	25306	
Teflon® Tubing, 1/8" OD x 0.094" ID x 3m (2.4mm ID)	3m	25307	
Tubing Clip	5-pk.	25310	
ValvTool Wrench	ea.	25321	
Open-End Wrenches (1/4" x 5/16")	2-pk.*	20110	
Clean-Cut™ Tubing Cutter	ea.	25069	
Replacement Blade for Clean-Cut™ Cutter	ea.	25070	
PEEKTM Union Connector 1/16"	2-pk.	25323	

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

## **Stainless Steel Survival Kit for HPLC**

Mobile Phase Sparge Filter: 2µm

Stainless Steel Survival Kit for HPLC

Inlet Filter: 10µm

Description

The stainless steel survival kit contains a wide range of tubing, fittings, and tools necessary to set up and maintain your HPLC system: a selection of lengths and IDs of ¹/¹e-inch tubing, plus nuts, ferrules, a ValvTool wrench, and a zero-dead-volume union.

ea.

ea.

qty.

25311

25312

25097



Stainless Steel Survival Kit

Contents:				
Description	color	qty.	cat.#	
HPLC Capillary Tubing, SS 1/16" x 0.005" x 5cm	red	3-pk.	25240	
HPLC Capillary Tubing, SS, 1/16" x 0.005" x 10cm	red	3-pk.	25241	
HPLC Capillary Tubing, SS, 1/16" x 0.005" x 20cm	red	3-pk.	25242	
HPLC Capillary Tubing, SS, 1/16" x 0.005" x 30cm	red	3-pk.	25243	
HPLC Capillary Tubing, SS, 1/16" x 0.007" x 5cm	gray	3-pk.	25244	
HPLC Capillary Tubing, SS, 1/16" x 0.007" x 10cm	gray	3-pk.	25245	
HPLC Capillary Tubing, SS, 1/16" x 0.007" x 20cm	gray	3-pk.	25246	
HPLC Capillary Tubing, SS, 1/16" x 0.007" x 30cm	gray	3-pk.	25247	
HPLC Capillary Tubing, SS, 1/16" x 0.010" x 5cm	blue	3-pk.	25248	
HPLC Capillary Tubing, SS, 1/16" x 0.010" x 10cm	blue	3-pk.	25249	
HPLC Capillary Tubing, SS, 1/16" x 0.010" x 20cm	blue	3-pk.	25250	
HPLC Capillary Tubing, SS, 1/16" x 0.010" x 30cm	blue	3-pk.	25251	
HPLC Capillary Tubing, SS, 1/16" x 0.020" x 5cm	yellow	3-pk.	25252	
HPLC Capillary Tubing, SS, 1/16" x 0.020" x 10cm	yellow	3-pk.	25253	
HPLC Capillary Tubing, SS, 1/16" x 0.020" x 20cm	yellow	3-pk.	25254	
HPLC Capillary Tubing, SS, 1/16" x 0.020" x 30cm	yellow	3-pk.	25255	
¹/¹6" Rheodyne® Style Nut		10-pk.	25095	
¹/½" Rheodyne® Style Ferrule		10-pk.	25096	
ValvTool Wrench		ea.	25321	
¹/16" Stainless Steel Ferrules		10-pk.	20286	
¹/½" Stainless Steel Nuts		10-pk.	20287	
Zero-Dead-Volume Internal Union		ea.	20148	

# it's a fact

Survival Kits are convenient and economical, compared to ordering individual items!





#### **PEEK™ Fitting Extractor**

Drill into the broken fitting, then screw the extractor into the fitting and remove it easily. Eliminates the need for heat or other techniques that could damage your column.













Description	qty.	cat.#
PEEK™ Fitting Extractor	ea.	25325

#### **PEEK™ Union Connector**

Allows you to quickly and reliably connect two pieces of 1/16-inch tubing. 0.3mm union bore. End fittings included.

Description	qty.	cat.#	
PEFKTM Union Connector 1/16"	2-nk	25323	



#### Zero-Dead-Volume Valco® Internal Union

Ends of tubing seat squarely at bottoms of fitting details. 300 series stainless steel. For ¹/¹6-inch OD tubing. Stainless steel ferrules included.

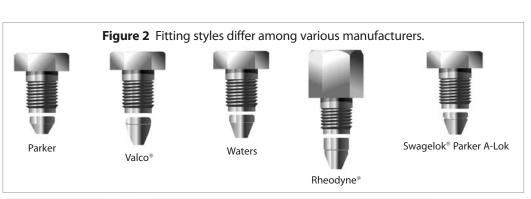
Description	Union Bore	Valco® #	qty.	cat.#	
Internal Union	0.15mm	ZU1XC	ea.	20147	
Internal Union	0.25mm	ZU1C	ea.	20148	
Internal Union	0.75mm	ZU1	ea.	20149	
Internal Union	1/16"	ZU1T	ea.	20150	

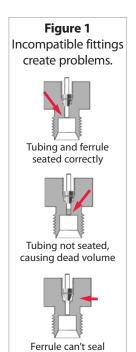


### **Improving Column Connections**

A good connection is necessary for trouble-free chromatography. Connecting incompatible fittings from different manufacturers can result in leaks, poor peak shape, and increased void volume (Figure 1). Each type of end-fitting has a unique seat depth or style. Generally, Restek, Valco®, Parker, and Upchurch® Scientific fittings are interchangeable; whereas Waters, SSI, Rheodyne®, and Gasukura fittings are not (Figure 2).

Our wrenchless universal 10-32 PEEK<sup>TM</sup> column connector (cat.# 25015, page 357) can be used with any style of end fitting, and all <sup>1</sup>/<sub>16</sub>-inch tubing. It is reusable and will adjust to any seat, depth, or style.







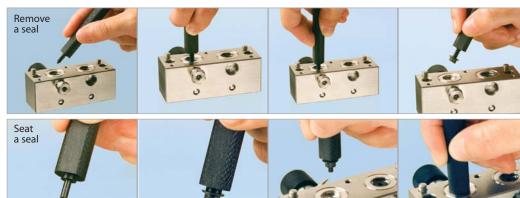


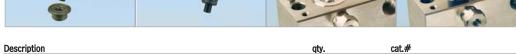
# Fittings, Connectors, Tools



#### **HPLC Piston Seal Insertion Tool**

Simplify pump maintenance: use one end to remove your old seal, then simply slip your new seal on the other end and push it flush into position. The tool cannot mar the surrounding metal surface of the pump housing.





ea.

21356



Use the flat side of the Piston Seal Insertion Tool to seat a Waters face seal.

#### **Secure-Fit Fittings**

HPLC Piston Seal Insertion Tool

A good connection between HPLC components is necessary for trouble-free chromatography. Secure-Fit connectors from Restek and Selerity Technologies ensure a consistent, leak-free seal—and they eliminate excess dead volume! An internal spring mechanism holds the capillary tubing at the proper depth in the female fitting. This seal is maintained while you finger-tighten the nut. These fittings are available in stainless steel or  $PEEK^{TM}$ , and in a variety of tubing lengths and internal diameters.



Stainless Steel Secure-Fit Fitting

#### **Secure-Fit Fittings—Single Connectors**

		Stainless Steel			PEEKTM	
Length	0.005" ID	0.007" ID	0.010" ID	0.005" ID	0.007" ID	0.010" ID
6cm	25181	25185	25190	25230	25234	25217
10cm	25182	25186	25191	25231	25235	25218
20cm	25183	25187	25192	25232	25236	25219
30cm	25184	25188	25193	25233	25237	25220
50cm	26510	26511	26512	_	_	_

#### **Secure-Fit Fittings—Two Connectors**

		Stainless Steel			PEEKTM	
Length	0.005" ID	0.007" ID	0.010" ID	0.005" ID	0.007" ID	0.010" ID
10cm	25208	25211	25214	25221	25224	25227
20cm	25209	25212	25215	25222	25225	25228
30cm	25210	25213	25216	25223	25226	25229
50cm	26513	26514	26515	_	_	_



PEEK™ Secure-Fit Fitting—Single Connector





#### **PEEK™ Tubing Elbows**

Tubing Elbows (90° and 180°) are ideal for routing <sup>1</sup>/<sub>16</sub>-inch PEEK<sup>TM</sup> tubing through your system. Simply snap the tubing into the elbow. Prevent pinching of PEEK<sup>TM</sup> tubing which can cause high pressure.

Description	qty.	cat.#	
PEEK <sup>™</sup> Tubing Elbow 90°	5-pk.	25308	
PEEK <sup>™</sup> Tubing Elbow 180°	5-pk.	25309	



## **Tubing Dressing Tool**

Opens stainless steel tubing bore and removes burrs. For 1/16-inch OD tubing or 1/8-inch OD tubing.

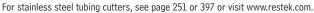
Description	qty.	cat.#
¹/½" Tubing Dressing Tool	ea.	20188
Replacement Insert for 1/16" Tubing Dressing Tool	ea.	20189
¹/s" Tubing Dressing Tool	ea.	20190
Replacement Insert for 1/8" Tubing Dressing Tool	ea.	20191



#### **Clean-Cut™ Tubing Cutter**

- Burr-free, perpendicular cuts that will not distort the tubing OD or close the ID.
- Use on PEEK<sup>™</sup>, Teflon®, Tefzel®, other polymeric tubing.

Description	qty.	cat.#	
Clean-Cut <sup>™</sup> Tubing Cutter	ea.	25069	
Replacement Blade for Clean-Cut™ Cutter	ea.	25070	





# Universal 10-32 PEEK™ Column Connectors and Plugs

Universal PEEK<sup>™</sup> Connectors allow easy installation of all ¹/16-inch tubing, including stainless steel. See "Improving Column Connections" data on page 355.

Description	qty.	cat.#	
PEEK <sup>™</sup> Column Connector (beige, round body)	10-pk.	25015	
PEEK <sup>™</sup> Column Plug (black)	10-pk.	25016	
PEEK™ Fingertight Fittings (blue, flat-sided)	10-pk.	25324	



PEEK™ Column Connector



PEEK™ Fingertight Fittings

#### Rheodyne® Style Nut and Ferrule

Replacement long nut for connecting stainless steel tubing to a Rheodyne® 6-port valve or other Rheodyne® part.

Description	qty.	cat.#	
¹/½" Rheodyne® Style Nut	10-pk.	25095	
1/16" Rheodyne® Style Ferrule	10-pk.	25096	



#### ValvTool Wrench

The ValvTool is a time-saving device that provides easy access to many hard-to-reach Rheodyne® or Valco® valves. For ¹/₄-inch nuts.

Description	qty.	cat.#
ValvTool Wrench	ea.	25321







# **Tubing**



#### **Inert PEEK™ Tubing**

- Replaces stainless steel, titanium, Teflon® or Tefzel® tubing.
- Less oxygen permeable and more temperature resistant (to 250°C) than Teflon® or Tefzel® tubing.
- Use with PEEK<sup>™</sup> fingertight or flangeless fittings.
- Use to 7,000psi (48,263kPa).

Description	Color Code	qty.	cat.#	
PEEK <sup>TM</sup> Tubing, <sup>1</sup> / <sub>16</sub> " OD x 0.0025" ID x 1m	pink dash stripe	3-pk.	25320	
PEEK <sup>TM</sup> Tubing, <sup>1</sup> / <sub>16</sub> " OD x 0.005" ID x 3m	red stripe	ea.	25065	
PEEK <sup>TM</sup> Tubing, <sup>1</sup> / <sub>16</sub> " OD x 0.007" ID x 3m	yellow stripe	ea.	25066	
PEEK <sup>TM</sup> Tubing, <sup>1</sup> / <sub>16</sub> " OD x 0.010" ID x 3m	blue stripe	ea.	25067	
PEEK <sup>TM</sup> Tubing, <sup>1</sup> / <sub>16</sub> " OD x 0.020" ID x 3m	orange stripe	ea.	25068	



### **HPLC Stainless Steel Capillary Tubing**

- 316 grade stainless steel.
- Precise pre-cut lengths.
- Smooth surface finish.
- · Ultra clean.

Whether you need to replace system tubing as part of your troubleshooting or are looking to reduce the dwell volume of your system as you move to narrower columns, Restek has the quality tubing in the lengths and IDs you need. Each ID is color-coded so it is easy to identify and replace correctly.

		0.005" ID (red)	0.007" ID (gray)	0.010" ID (blue)	0.020" ID (yellow)
Length	qty.	cat.#	cat.#	cat.#	cat.#
1/16" OD Tubing					
5cm	3-pk.	25240	25244	25248	25252
10cm	3-pk.	25241	25245	25249	25253
20cm	3-pk.	25242	25246	25250	25254
30cm	3-pk.	25243	25247	25251	25255



#### **Teflon® Tubing**

- Ideal for mobile phase inlet lines.
- Chemically inert.
- Use to 500psi (3,447kPa) and 80°C.

Description	qty.	cat.#	
Teflon® Tubing, 1/8" OD x 0.063" ID x 3m (1.6mm ID)	3m	25306	
Teflon® Tubing, 1/8" OD x 0.094" ID x 3m (2.4mm ID)	3m	25307	



#### **Tubina Clip**

Securely holds 1/16-inch or 1/8-inch tubing in beaker, flask, or bottle up to 4mm thick.

Description	qty.	cat.#	
Tubing Clip	5-pk.	25310	

