

## Choose for Your Instrument



### GC Supplies - PerkinElmer Instrument Quick Pick Guide

- Syringes
- Septa
- Inlet Liners
- O-rings and Sealing Rings
- SilTite™ FingerTite Ferrules
- Ferrules

Your chromatography analysis does not end with the selection of the GC column. The combination of components selected for your instrument also make an important contribution to successful separations. SGE brings technology and chromatography expertise to improve your chromatography.

## SGE Supplies for Sample Preparation, Sample Introduction, and Separation

### SAMPLE INTRODUCTION - Syringes

Our involvement in all areas of chromatography provides us with a unique understanding of your requirements enabling us to optimize syringe design for sample introduction.

All our syringes, both manual and autosampler, incorporate SGE's Diamond Syringe Technology offering significantly improved levels of durability, clarity and accuracy. SGE has a comprehensive range of syringe options including plunger protection, removable or fixed needles, a range of needle gauge and length options as well as needle-tip style alternatives.

### SAMPLE INTRODUCTION – GC Inlet Liners

The GC Inlet liner is where the sample is introduced and vaporized into the gaseous phase. The design of the liner is crucial, as is liner deactivation, to ensure reproducible and accurate chromatography.

### SEPARATION - GC Connections (ferrules and fittings)

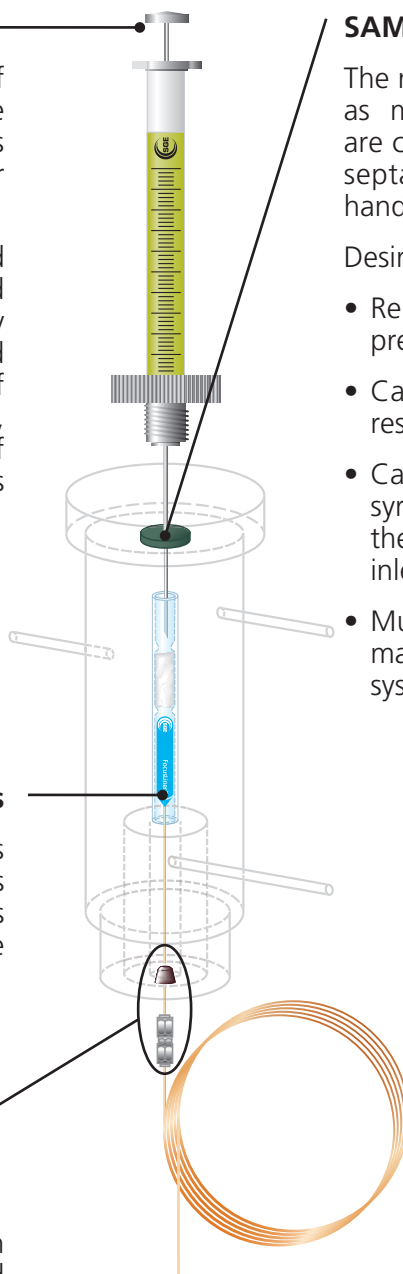
SGE manufactures an array of connection types for GC use. Poorly defined or selected connections can lead to an increase in dead volume, leaks from cycled temperatures and mismatched tubing sizes.

### SAMPLE INTRODUCTION - Septa

The role of septa for GC analysis is key as many chromatographic problems are caused as a result of inappropriate septa material or inappropriate handling of the septa.

Desired septa attributes:

- Reliably seal against the carrier gas pressure in the inlet.
- Capable of being pierced and resealed time after time.
- Capable of being pierced by the syringe needle without pieces of the septa being deposited in the GC inlet system.
- Must not contaminate or bleed material into the chromatographic system.



# Instrument Quick Pick for PerkinElmer

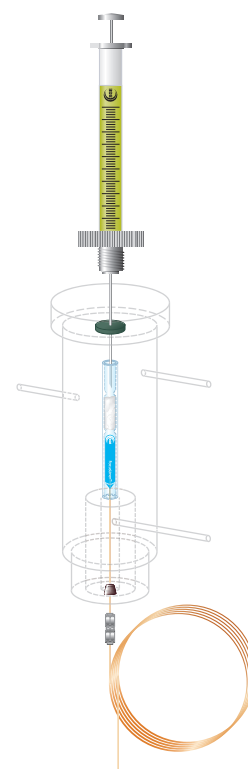
## Autosampler Syringes

All needles are 70 mm long with a cone point style.

### PerkinElmer AutoSystem

Volume	Needle Gauge (OD mm)	Syringe Code	Syringe Part No.	Pack Size	Spare Needle Part No.	Pack Size	Spare Plunger Part No.	Pack Size
<b>Fixed Needle</b>								
5 µL	26 (0.47)	5F-PE-0.47C	001953	1	–	–	–	–
5 µL	23 (0.63)	5F-PE-0.63C	001954	1	–	–	–	–
5 µL <i>Gas Tight</i>	26 (0.47)	5F-PE-GT-0.47C	001955	1	–	–	031807	2
5 µL <i>Gas Tight</i>	23 (0.63)	5F-PE-GT-0.63C	001957	1	–	–	031807	2
50 µL	23 (0.63)	50F-PE-0.63C	004670	1	–	–	–	–
<b>Removable Needle</b>								
0.5 µL	26 (0.47)	0.5BR-PE-0.47C	000475	1	033750	1*	–	–
0.5 µL	23 (0.63)	0.5BR-PE-0.63C	000478	1	033765	1*	–	–

\*Denotes spare Needle and Plunger kit.



## Septa

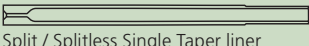
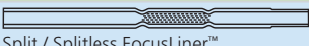
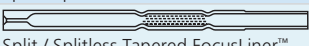
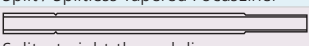
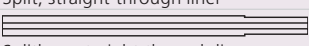
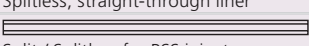
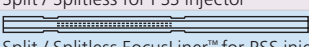
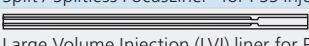
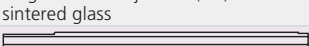
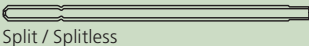
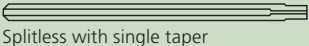
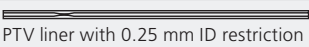
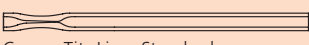
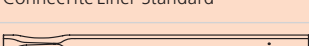
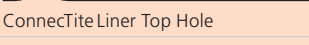
SGE has a number of different septa materials:

- GP = For non-demanding routine applications.
- EC = Combines significantly longer injection life, low bleed and low injection port adhesion.
- MN = Premium septa for autosamplers, up to 400 injection per septum.
- HT = Bleed and temperature optimized, combined with outstanding mechanical properties.

Type	Material	Durability	Resealing	Solvent Resistance	Tear Resistance	Maximum Temperature
GP	Silicone	Good	Good	Excellent	Good	200 °C
EC	High Temperature Silicone	Excellent	Excellent	Excellent	Excellent	400 °C
MN	High Temperature Silicone	Excellent	Excellent	Excellent	Excellent	400 °C
HT	BTO Silicone	Excellent	Excellent	Excellent	Excellent	400 °C

Diameter	Material	Pack Size	Part No.
For PerkinElmer Sigma, 900, 990, 8000 Series, AutoSystem and Clarus			
11	GP	48	041826
11	EC	24	041902
11	MN	48	041856
11	HT	24	041898

## Inlet Liners

Description and Geometry Sketch	OD (mm)	ID (mm)	Length (mm)	Pack Size	Part No.
<b>For AutoSystem™ &amp; Clarus 500, 600</b>					
 Split / Splitless Single Taper liner	6.2	4	92	1	09209901
				5	0920990
 Split / Splitless FocusLiner™	6.2	4	92	5	092092
				25	09209225
 Split / Splitless Tapered FocusLiner™	6.2	4	92	5	092092
				25	09209225
 Split, straight-through liner	6.2	4	92	5	092100
				25	09210025
 Splitless, straight-through liner	6.2	2	92	5	092103
 Split / Splitless for PSS injector	4	2	86.2	5	092098
 Split / Splitless FocusLiner™ for PSS injector	4	2	86.2	5	092101
 Large Volume Injection (LVI) liner for PSS injector, sintered glass	4	2	86.2	5	092244
 Packed Column liner	6	3	112	5	092236
<b>For 8000 and Sigma series</b>					
 Split / Splitless	5	3	100	5	092091
				1	09209401
 Splitless with single taper	5	2	100	1	09209401
<b>PTV Liner</b>					
 PTV liner with 0.25 mm ID restriction (recessed gooseneck)	2	1	88	5	092097
<b>For AutoSystem Injectors</b>					
 ConnectTite Liner Standard	6.2	4	92	5	092344
 ConnectTite Liner Top Hole	6.2	4	92	5	092345
 ConnectTite Liner Bottom Hole	6.2	4	92	5	092346

- Taper / Gooseneck
- FocusLiner™
- Taper Focus
- ConnectTite
- Straight
- Double Taper
- PTV/LVI

## O-rings and Sealing Rings

Description	Usage	Pack Size	Part No.
Viton O-ring	Can be used at temperatures up to 300 °C. For use with 6.2 mm OD liners.	10	0726536
Graphite Vespel Sealing Ring for PSS system	Can be used at temperatures up to 325 °C. For use with 4mm OD liners	10	0726522

## SilTite FingerTite Ferrules

Description		Column ID	Ferrule ID (mm)	Pack Size	Part No.
SilTite FingerTite PerkinElmer Injector/GC-MS Starter Kit		0.1-0.25 mm	0.4	*	073623
SilTite FingerTite PerkinElmer Injector/FID Starter Kit		0.1-0.25 mm	0.4	*	073622
SilTite FingerTite Ferrule 0.4 mm	Replacement Items	0.1-0.25 mm	0.4	10	073630
SilTite FingerTite Ferrule 0.5 mm	Replacement Items	0.32 mm	0.5	10	073631
SilTite FingerTite Ferrule Blanking	Replacement Items	–	–	2	073633
SilTite FingerTite Female Nut	Replacement Items	–	–	5	073636

\* Each starter kit includes all the parts necessary to convert one GC system (one injector and one detector) to the SilTite FingerTite system suitable for installing 0.1 – 0.25 mm ID capillary columns. In addition there are five SilTite FingerTite nuts, one packet (ten ferrules) of 0.4 mm ID SilTite FingerTite ferrules and a ferrule install tool which allows you to seat the ferrule in the correct position on the capillary column.



## Ferrules

Instrument	Column ID	Size of Nut	Ferrule ID	Pack Size	Part No.
<b>15% Graphite / 85% Vespel® Ferrules</b>					
For Injectors & Detectors at atmospheric pressure e.g. FID	0.1-0.25 mm	1/16"	0.4 mm	10	072663
	0.1-0.25 mm	1/8"	0.4 mm	10	0726703
	0.32 mm	1/16"	0.5 mm	10	072654
	0.32 mm	1/8"	0.5 mm	10	0726702
	0.45-0.53 mm	1/16"	0.8 mm	10	072655
	0.45-0.53 mm	1/8"	0.8 mm	10	072671
	1/8" OD Packed Columns	1/8"	1/8"	10	072669
1/4" OD Packed Columns	1/4"	1/4"	10	072667	
<b>100% Graphite Ferrules</b>					
For Injectors & Detectors at atmospheric pressure e.g. FID (Not for GC-MS)	0.1-0.32 mm	1/16"	0.5 mm	10	072627
	0.1-0.32 mm	1/8"	0.5 mm	10	072624
	0.45-0.53 mm	1/16"	0.8 mm	10	072626
	0.45-0.53 mm	1/8"	0.8 mm	10	0726280
	1/8" OD Packed Columns	1/8"	1/8"	10	072622
1/4" OD Packed Columns	1/4"	1/4"	10	072621	
<b>SilTite Metal Ferrules</b>					
For GC-MS Interface Connection (Starter Kit)	0.1-0.25 mm	–	0.4 mm	10*	073200
	0.32 mm	–	0.5 mm	10*	073201
	0.53 mm	–	0.8 mm	10*	073202
<b>Replacement SilTite Ferrules</b>					
For GC-MS Interface Connection	0.1-0.25 mm	–	0.4 mm	10	073220
	0.32 mm	–	0.5 mm	10	073221
	0.53 mm	–	0.8 mm	10	073222
	1/32"	–	0.81 mm	10	073219
<b>Replacement SilTite Nuts</b>					
Replacement SilTite Nuts	–	–	5	–	073224

\*Includes ten ferrules, two SilTite nuts.

SGE's involvement in gas chromatography includes the support we give to our customers.

### Technical Support

Contact us at [techsupport@sge.com](mailto:techsupport@sge.com) for technical support information.

### Our Website

[www.sge.com](http://www.sge.com) is a detailed source for information on chromatography, applications and SGE products. It also profiles the latest posters and materials developed by our technical experts based around the world.

### SGE Product Selection Guide

Our product selection guide can be accessed at [www.sge.com/selectionguide](http://www.sge.com/selectionguide)

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