

Choose for  
Your Instrument



## GC Supplies - Instrument Quick Pick Guide

- Agilent Technologies
- Bruker (Varian)
- PerkinElmer
- Shimadzu
- Thermo Scientific

# GC Supplies - Instrument Quick Pick Guide

## Choose for Your Instrument

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. Choose SGE to improve your chromatography.

### Sample Introduction – Syringes

The SGE Diamond Syringe Range offers significantly improved levels of durability, clarity and accuracy.

SGE manual and autosampler syringes are designed for optimal sample introduction.

Choose from 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 – Septa

The role of septa for GC analysis is key as many chromatographic problems are caused by use 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 being deposited in the GC inlet system.
- Must not contaminate or bleed material into the chromatographic system.

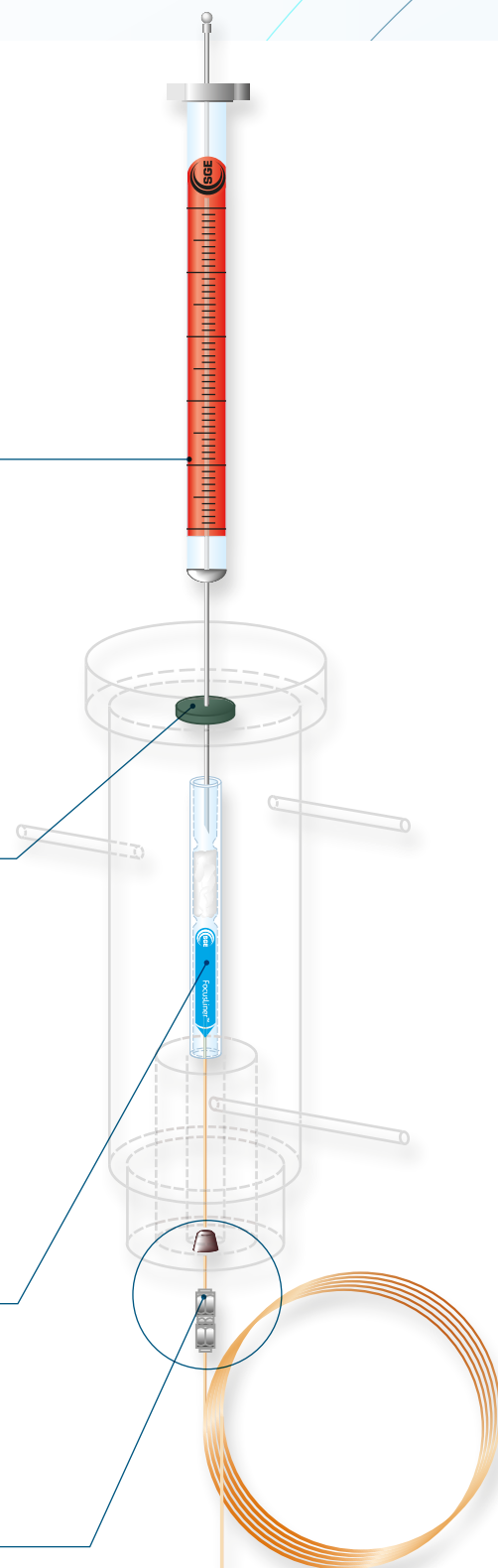
### Sample Introduction – GC Inlet Liners

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.

### Sample Introduction – GC Connections (ferrules and fittings)

SGE GC Connections are designed to minimize time spent on installation, and are suitable for a wide range of applications.

Poorly defined or selected connections can lead to an increase in dead volume, leaks and mismatched tubing sizes after temperature cycling.



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Choose SGE  
to improve your  
chromatography.

### Autosampler Syringes

All needles are 42 mm long with a cone tip.

#### Agilent 7673, 7683, 7693A & 6850 ALS

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 Dual Gauge Needle</b>								
5 µL	23-26s (0.63/0.47)	5F-AG-0.63/0.47C	001821	1	-	-	-	-
10 µL	23-26s (0.63/0.47)	10F-AG-0.63/0.47C	002821	1	-	-	-	-
10 µL Gas Tight	23-26s (0.63/0.47)	10F-AG-GT-0.63/0.47C	002826	1	-	-	031808	2
<b>Fixed Straight Needle</b>								
5 µL	26 (0.47)	5F-AG-0.47C	001800	1	-	-	-	-
5 µL (m)	23 (0.63)	5F-AG-0.63C	001810	1	-	-	-	-
10 µL	26 (0.47)	10F-AG-0.47C	002800	1	-	-	-	-
10 µL (m)	23 (0.63)	10F-AG-0.63C	002810	1	-	-	-	-
10 µL (m) Gas Tight	23 (0.63)	10F-AG-GT-0.63C	002812	1	-	-	031808	2
<b>Removable Dual Gauge Needle</b>								
0.5 µL	23-26s (0.63/0.47)	0.5BR-AG-0.63/0.47C	000415	1	033730	1*	-	-
10 µL Gas Tight	23-26s (0.63/0.47)	10R-AG-GT-0.63/0.47C	002829	1	037730	2	031809	2
<b>Removable Straight Needle</b>								
0.5 µL	26 (0.47)	0.5BR-AG-0.47C	000400	1	033708	1*	-	-
0.5 µL (m)	23 (0.63)	0.5BR-AG-0.63C	000410	1	033715	1*	-	-
1 µL	23 (0.63)	1BR-AG-0.63C	000610	1	034715	1*	-	-
10 µL	26 (0.47)	10R-AG-0.47C	002805	1	037715	2	-	-
10 µL (m)	23 (0.63)	10R-AG-0.63C	002815	1	037717	2	-	-

(m) Suitable for use with the Merlin Microseal™ Injector.

\* Denotes Spare Needle and Plunger kit.



## Septa

Choose from a number of different septa types:

- 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 injections 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

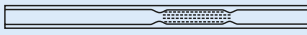

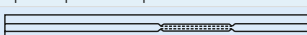
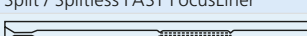
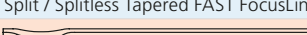



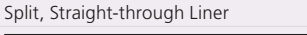
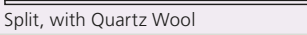
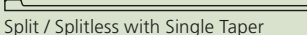
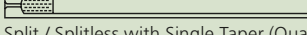
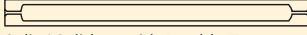


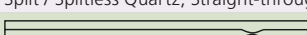
Diameter (mm)	Type	Pack Size	Part No.
<b>For Agilent 7620, 5790, 5880, 5890</b>			
5	GP	50	041820
5	MN	50	041850
<b>For Agilent 5700, 5800, 5900</b>			
9.5	GP	50	0418240
9.5	EC	25	041901
9.5	HT	50	041897
<b>For Agilent 7890, 6890, 5890, 5880, 4890, 6850</b>			
11	GP	50	041826
11	EC	25	041902
11	MN	50	041856
11	HT	25	041898
<b>For Agilent 5750, 710, 720, 810, 7610</b>			
12.5	GP	48	041828
12.5	HT	24	0418992
12.5	EC	24	041906



# Agilent Technologies

## GC Supplies - Instrument Quick Pick Guide

### Inlet Liners

Description and Geometry	OD (mm)	ID (mm)	Length (mm)	Pack Size	Part No.
<b>For Agilent 5890, 6850, 6890, 7890 and HP4890</b>					
 Split / Splitless FocusLiner	6.3	4	78.5	5	092002
				25	092219
 Split / Splitless Taper FocusLiner	6.3	4	78.5	5	092003
				25	092011
 Split / Splitless FAST FocusLiner	6.3	2.3	78.5	5	092005
				25	092008
 Split / Splitless Tapered FAST FocusLiner	6.3	2.3	78.5	5	092111
				25	092115
 ConnectTite Liner Standard	6.3	4	78.5	5	092324
 ConnectTite Liner Top Hole	6.3	4	78.5	5	092325
 ConnectTite Liner Bottom Hole	6.3	4	78.5	5	092326
 Split, Straight-through Liner	6.3	4	78.5	5	092007
				25	092222
 Split, with Quartz Wool	6.3	4	78.5	5	092001
				25	092220
 Split / Splitless with Single Taper	6.3	4	78.5	5	092017
				25	092229
 Split / Splitless with Single Taper (Quartz Wool)	6.3	4	78.5	5	092019
				25	092218
 Split / Splitless with Double Taper	6.3	4	78.5	5	092018
				25	092230
 Direct, Straight-through Liner	6.3	1.2	78.5	5	092016
				25	092224
 Split / Splitless Quartz, Straight-through Liner	6.1	2	78.5	5	092004
 Splitless with Recessed Gooseneck	6.3	2	78.5	5	092013
				25	092010
 Split / Splitless Recessed Gooseneck (Quartz Wool)	6.3	4	78.5	25	092223



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

### O-rings and Sealing Rings

Description	Usage	Pack Size	Part No.
Viton O-ring	Temperatures up to 300 °C. Suitable for liners with OD of 6.3 mm.	10	0726532
Graphite Sealing Ring	Temperatures up to 450 °C. Suitable for all inlet liners above except 092004 and 09200401.	10	0726005
Graphite Sealing Ring	Temperatures up to 450 °C. Suitable for use with liners 092004 and 09200401.	10	0726006

## SilTite® FingerTite Ferrules

Description	Column ID	Ferrule ID	Pack Size	Part No.
SilTite FingerTite Agilent INJ / FID Kit	0.1-0.25 mm	0.4 mm	*	073610
SilTite FingerTite Agilent Capillary / FID Kit	0.1-0.25 mm	0.4 mm	*	073611
SilTite FingerTite Agilent INJ / MS Kit	0.1-0.25 mm	0.4 mm	*	073612
SilTite FingerTite Agilent INJ / FID Kit	0.53 mm	0.7 mm	*	07361053
SilTite FingerTite Agilent Injector Kit	0.53 mm	0.7 mm	*	07361054
SilTite FingerTite Agilent Capillary / FID Kit	0.53 mm	0.7 mm	*	07361153
SilTite FingerTite Agilent Capillary Injector Kit	0.53 mm	0.7 mm	*	07361154
<b>Replacement Parts</b>				
SilTite FingerTite Ferrule 0.4 mm	0.1-0.25 mm	0.4 mm	10	073630
SilTite FingerTite Ferrule 0.5 mm	0.32 mm	0.5 mm	10	073631
SilTite FingerTite Ferrule 0.7 mm	0.53 mm	0.7 mm	10	073632
SilTite FingerTite Blanking Ferrule	–	–	2	073633
SilTite FingerTite Female Nut	–	–	5	073636
SilTite FingerTite INJ Base Seal	0.1-0.25 mm	–	2	073640
SilTite FingerTite INJ Base Seal	0.53 mm	–	2	07364053
SilTite FingerTite Capillary Adaptor	–	–	1	0736101
SilTite FingerTite MS Adaptor	–	–	1	0736102
SilTite FingerTite FID Detector	–	–	1	0736103
SilTite FingerTite Injector	0.1-0.25 mm	–	1	0736104

\* Each starter kit includes all the parts necessary to convert one GC system (one injector and one detector) to the SilTite FingerTite system. In addition there are five SilTite FingerTite nuts, ten 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	Ferrule ID	Pack Size	Part No.
<b>15% Graphite / 85% Vespel® Ferrules</b>				
Injectors & Detectors at atmospheric pressure e.g. FID	0.1-0.25 mm	0.4 mm	10	073109
	0.32 mm	0.5 mm	10	073111
	0.53 mm	0.8 mm	10	073113
	for 1/8" OD Packed Columns	1/8"	10	072669
	for 1/4" OD Packed Columns	1/4"	10	072667
GC-MS Interface Connection	0.1-0.25 mm	0.4 mm	10	072663
	0.32 mm	0.5 mm	10	072654
	0.53 mm	0.8 mm	10	072655
<b>100% Graphite Ferrules</b>				
Injectors & Detectors at atmospheric pressure e.g. FID (Not for GC-MS)	0.1-0.32 mm	0.5 mm	10	072635
	0.45-0.53 mm	0.8 mm	10	072636
	for 1/8" OD Packed Columns	1/8"	10	072602
	for 1/4" OD Packed Columns	1/4"	10	072601
<b>SilTite® Metal Ferrules</b>				
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
Split / Splitless Injectors (Starter Kit)	0.1-0.25 mm	0.4 mm	10#	073270
	0.32 mm	0.5 mm	10#	073271
	0.45-0.53 mm	0.8 mm	10#	073272
	1/32"	0.81 mm	10#	073273
<b>Replacement SilTite® Metal Ferrules</b>				
All Connections	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>				
GC-MS Interface Connection	–	–	5	073224
Split / Splitless Injector	–	–	5	073226
<b>Replacement SilTite® Base Seals</b>				
Split / Splitless Injector	–	–	2	073400
	–	–	10	073401

\* Includes ten ferrules, two SilTite nuts. # Includes ten ferrules, two SilTite nuts and two SilTite Inlet Base Seals.



# Bruker (Varian)

## GC Supplies - Instrument Quick Pick Guide



### Autosampler Syringes

Volume	Length (mm)	Needle Gauge (OD mm)	Tip Style	Syringe Code	Syringe Part No.	Pack Size	Needle Part No.	Pack Size	Plunger Part No.	Pack Size
<b>Bruker (Varian) 8035, 8100 and 8200</b>										
<b>Removable Needle</b>										
1 µL*	51	26 (0.47)	Cone	1BR-VA8X	000655	1	034720	1**	-	-
10 µL Gas Tight	53	25 (0.5)	S/Hole	10R-GT-VA8X-II	002924	1	037777	1	031218	1
<b>Needle Alternatives for P/N 002924</b>										
-	50	25 (0.5)	Bevel	N10-VA8035-II	-	1	037776	2	-	-
-	53	23 (0.63)	S/Hole	N10-VA8X00H-0.63-II	-	1	037779	2	-	-
-	53	25 (0.5)	S/Hole	N10-VA800H-II(0.2)	-	1	037780	1	-	-
<b>Bruker (Varian) CP-8400/8410, CP-9010/9050</b>										
<b>Fixed Needle</b>										
10 µL	50	26 (0.47)	Bevel	10F-VA8400-5/0.47	002950	1	-	-	-	-
10 µL	50	23 (0.63)	Cone	10F-VA8400/BT-5/0.63C	002951	1	-	-	-	-
<b>Removable Needle</b>										
10 µL Gas Tight	50	26 (0.47)	Cone	10R-BT-GT-0.47C	0029851	1	037010	2	03181211	2

\*Not suitable for 8200 autosampler. \*\*Denotes Plunger and Needle Kit.

### Septa

Choose from a number of different septa types:

- 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 injections per septum.
- HT = Bleed and temperature optimized, combined with outstanding mechanical properties.

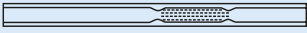

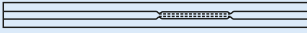

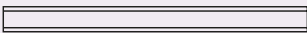

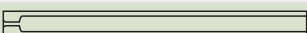
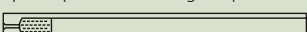
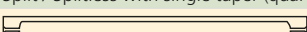
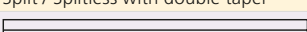
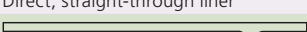
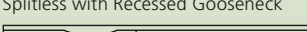





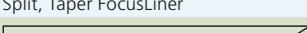
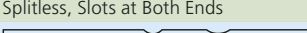
Type	Material	Durability	Resealing	Solvent Resistance	Tear Resistance	Maximum Temperature
GP	Silicone	Good	Good	Excellent	Good	200 °C
EC	High Temperature Silicone	Excellent	Excellent	Excellent	Excellent	400 °C
MN	High Temperature Silicone	Excellent	Excellent	Excellent	Excellent	400 °C
HT	BTO Silicone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

Diameter (mm)	Type	Pack Size	Part No.
<b>For Varian / Bruker 1177 Injector</b>			
9	GP	50	041824
9	EC	25	041900
9	MN	50	041854
9	HT	25	041896
<b>For Varian / Bruker 1040, 1041, 1060, 1061 injector</b>			
9.5	GP	50	0418240
9.5	EC	25	041901
9.5	HT	50	041897
<b>For Varian / Bruker 1040, 1041, 1060, 1061 injector</b>			
11	GP	48	041826
11	EC	25	041902
11	MN	48	041856
11	HT	25	041898





## Inlet Liners

Description and Geometry	OD (mm)	ID (mm)	Length (mm)	Pack Size	Part No.
<b>For 1177 Injector</b>					
 Split / Splitless FocusLiner	6.3	4	78.5	5	092002
				25	092219
 Split / Splitless Taper FocusLiner	6.3	4	78.5	5	092003
				25	092011
 Split / Splitless FAST FocusLiner	6.3	2.3	78.5	5	092005
				25	092008
 Split / Splitless Tapered FAST FocusLiner	6.3	2.3	78.5	5	092111
				25	092115
 Split, straight-through liner	6.3	4	78.5	5	092007
				25	092222
 Split, with quartz wool	6.3	4	78.5	5	092001
				25	092220
 Split / Splitless with single taper	6.3	4	78.5	5	092017
				25	092229
 Split / Splitless with single taper (quartz wool)	6.3	4	78.5	5	092019
				25	092218
 Split / Splitless with double taper	6.3	4	78.5	5	092018
				25	092230
 Direct, straight-through liner	6.3	1.2	78.5	5	092016
				25	092224
 Splitless with Recessed Gooseneck	6.3	2	78.5	5	092013
				25	092010
 Split / Splitless Recessed Gooseneck (quartz wool)	6.3	4	78.5	25	092223
<b>For 1075/1077 Injector</b>					
 Split, FAST FocusLiner	6.3	2.3	72	1	09211301
 Split with Quartz Wool	6.3	4	72	5	092021
				25	09222125
 Split FocusLiner with Top-end Restriction	6.3	4	72	5	092028
 Splitless FocusLiner with Top-end Restriction	6.3	4	74	1	09202601
 Split, Taper FocusLiner	6.3	4	72	1	09202501
 Splitless, Slots at Both Ends	6.3	2	74	5	092024
				25	092228
 Split FocusLiner	6.3	4	72	5	092022

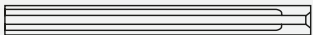


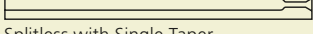
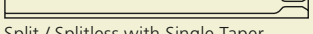

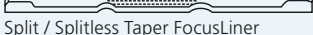
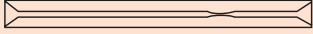

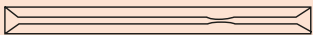


- Taper / Gooseneck
- FocusLiner
- Taper FocusLiner
- ConnecTite
- Straight
- Double Taper
- PTV/LVI

# Bruker (Varian)

## GC Supplies - Instrument Quick Pick Guide

### Inlet Liners Continued

Description and Geometry	OD (mm)	ID (mm)	Length (mm)	Pack Size	Part No.
<b>For 1078/1079 Injector</b>					
 Sintered Glass, Large Volume Injection (LVI) Liner	5	1.8/3.4	54	5	092245
				25	09224525
 Straight-through Liner	5	0.5	54	5	092031
 SPME liner	5	0.75	54	5	092117
 Splitless with Single Taper	5	2	54	5	092039
 Split / Splitless with Single Taper	5	3.4	54	5	092038
				25	09203825
 Split / Splitless FocusLiner	5	3.4	54	5	092037
 Split / Splitless Taper FocusLiner	5	3.4	54	5	092036
<b>For 1093/1094 Injector</b>					
 ConnectTite SPI Liner, (Restriction = 0.25 mm)	4.6	0.5	54	5	092027
 ConnectTite SPI Liner, (Restriction = 0.5 mm) for 0.53 mm ID On-column	4.6	0.8	54	5	092034
 ConnectTite™ SPI Liner, (Restriction = 0.25 mm)	4.6	0.8	54	5	092030



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

### O-rings and Sealing Rings

Description	Usage	Pack Size	Part No.
Viton O-ring for 1177 Injector	Temperatures up to 300 °C.	10	0726532
Graphite Sealing Ring for 1075 & 1077 Injectors	Temperatures up to 450 °C.	10	072601
Graphite Sealing Ring for 1078 & 1079 Injectors	Temperatures up to 450 °C.	10	0726217

## SilTite® FingerTite Ferrules

Description	Column ID	Ferrule ID	Pack Size	Part No.
SilTite FingerTite Bruker (Varian) Injector/GC-MS Kit	0.1-0.25 mm	0.4 mm	*	073619
SilTite FingerTite Bruker (Varian) Injector/FID Kit	0.1-0.25 mm	0.4 mm	*	073618
SilTite FingerTite Bruker (Varian) Injector/FID Kit	0.53 mm	0.7 mm	*	07361853
SilTite FingerTite Bruker (Varian) Injector Kit	0.53 mm	0.7 mm	*	07361854
<b>Replacement Parts</b>				
SilTite FingerTite Ferrule 0.4 mm	0.1-0.25 mm	0.4 mm	10	073630
SilTite FingerTite Ferrule 0.5 mm	0.32 mm	0.5 mm	10	073631
SilTite FingerTite Ferrule 0.7 mm	0.53 mm	0.7 mm	10	073632
SilTite FingerTite Ferrule Blanking	–	–	2	073633
SilTite FingerTite Female Nut	–	–	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. In addition there are five SilTite FingerTite nuts, ten 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	Ferrule ID	Pack Size	Part No.
<b>15% Graphite / 85% Vespel® Ferrules</b>				
GC-MS & Detectors at atmospheric pressure e.g. FID	0.1-0.25 mm	0.4 mm	10	072663
	0.32 mm	0.5 mm	10	072654
	0.53 mm	0.8 mm	10	072655
Packed Columns	1/8" OD Packed Columns	1/8"	10	072669
	1/4" OD Packed Columns	1/4"	10	072667
<b>100% Graphite Ferrules</b>				
Injectors & Detectors at atmospheric pressure e.g. FID	0.1-0.32 mm	0.5 mm	10	072627
	0.45-0.53 mm	0.8 mm	10	072626
	1/8" OD Packed Columns	1/8"	10	072622
	1/4" OD Packed Columns	1/4"	10	072621
<b>SilTite® Metal Ferrules</b>				
GC-MS Interface Connections (Starter Kit)	0.1-0.25 mm	0.4 mm	10*	073300
	0.32 mm	0.5 mm	10*	073301
	0.53 mm	0.8 mm	10*	073302
<b>Nuts for Varian Injector</b>				
	–	–	2	1034060
<b>Replacement SilTite® Ferrules</b>				
GC-MS Interface Connections	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>				
SilTite Metal Nuts	–	–	5	073231



\*Includes ten ferrules, two SilTite nuts.



## Autosampler Syringes

All needles are 70 mm long with a cone tip 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 Gas Tight	26 (0.47)	5F-PE-GT-0.47C	001955	1	-	-	031807	2
5 µL Gas Tight	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

Choose from a number of different septa types:





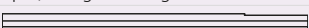



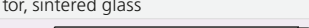


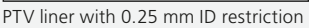
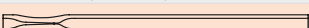
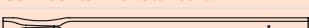
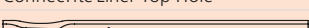
- GP = For non-demanding routine applications.
- EC = Combines significantly longer injection life, low bleed and low injection port adhesion.
- MN = Premium septa for autosamplers, up to 400 injections per septum.
- HT = Bleed and temperature optimized, combined with outstanding mechanical properties.



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 (mm)	Type	Pack Size	Part No.
<b>For PerkinElmer Sigma, 900, 990, 8000 Series, AutoSystem and Clarus</b>			
11	GP	48	041826
11	EC	25	041902
11	MN	48	041856
11	HT	25	041898

## Inlet Liners

Description and Geometry	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 Taper 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
 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>					
 ConnecTite Liner Standard	6.2	4	92	5	092344
 ConnecTite Liner Top Hole	6.2	4	92	5	092345
 ConnecTite Liner Bottom Hole	6.2	4	92	5	092346



- Taper / Gooseneck
- FocusLiner
- Taper FocusLiner
- ConnecTite
- Straight
- Double Taper
- PTV/LVI

## O-rings and Sealing Rings

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

# PerkinElmer

## GC Supplies - Instrument Quick Pick Guide

### SilTite® FingerTite Ferrules

Description	Column ID	Ferrule ID	Pack Size	Part No.
SilTite FingerTite PerkinElmer Injector/GC-MS Starter Kit	0.1-0.25 mm	0.4 mm	*	073623
SilTite FingerTite PerkinElmer Injector/FID Starter Kit	0.1-0.25 mm	0.4 mm	*	073622
SilTite FingerTite PerkinElmer Injector/FID Starter Kit	0.53 mm	0.7 mm	*	07362253
SilTite FingerTite PerkinElmer Injector Starter Kit	0.53 mm	0.7 mm	*	07362254
<b>Replacement Parts</b>				
SilTite FingerTite Ferrule 0.4 mm	0.1-0.25 mm	0.4 mm	10	073630
SilTite FingerTite Ferrule 0.5 mm	0.32 mm	0.5 mm	10	073631
SilTite FingerTite Ferrule 0.7 mm	0.53 mm	0.7 mm	10	073632
SilTite FingerTite Ferrule Blanking	–	–	2	073633
SilTite FingerTite Female Nut	–	–	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. In addition there are five SilTite FingerTite nuts, ten 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.



### Autosampler Syringes

All needles are 42 mm long with a cone tip style.

#### Shimadzu AOC14, AOC17 and AOC20

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	23 (0.63)	5F-S-0.63C	001988	1	–	–	–	–
<b>Removable Needle</b>								
0.5 µL	26 (0.47)	0.5BR-S-0.47C	000440	1	033738	1*	–	–
0.5 µL	23 (0.63)	0.5BR-S-0.63C	000445	1	033745	1*	–	–
10 µL	26 (0.47)	10R-S-0.47C	002897	1	037745	2	–	–
10 µL	23 (0.63)	10R-S-0.63C	002898	1	037747	2	–	–
10 µL Gas Tight	23 (0.63)	10R-S-GT-0.63C	002902	1	037747	2	031798	2

\*Denotes spare Needle and Plunger kit.

### Septa

Choose from a number of different septa types:



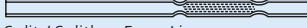

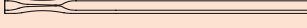




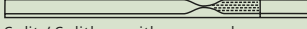
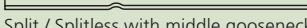

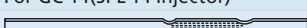


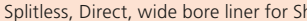

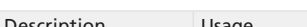


- Enduro Blue = For non-demanding routine applications.
- EC = Combines significantly longer injection life, low bleed and low injection port adhesion.
- HT = Bleed and temperature optimized, combined with outstanding mechanical properties.

Type	Material	Durability	Resealing	Solvent Resistance	Tear Resistance	Maximum Temperature
Enduro Blue	High Temperature Silicone	Excellent	Excellent	Excellent	Excellent	350 °C
EC	High Temperature Silicone	Excellent	Excellent	Excellent	Excellent	400 °C
HT	BTO Silicone	Excellent	Excellent	Excellent	Excellent	400 °C

Type	Pack Size	Part No.
<b>Shimadzu 9A, 14, 15A, 16, 17A, 2010 &amp; 2014</b>		
Enduro Blue	50	041890
EC	50	041905
HT	50	041895



### Inlet Liners

Description and Geometry	OD (mm)	ID (mm)	Length (mm)	Pack Size	Part No.
<b>For GC-2010 (SPL-2010 Injector), GC-2014 (SPL-2014 Injector) and GC-17A (SPL-17 Injector)</b>					
 Split / Splitless FocusLiner *	5	3.4	95	5	092059
 Split / Splitless Taper FocusLiner *	5	3.4	95	5	092058
 Split / Splitless FocusLiner	5	3.4	95	5	092062
 Split / Splitless Taper FocusLiner	5	3.4	95	5	092068
 ConnectTite Liner Standard	5	3.4	95	5	092329
 ConnectTite Liner Top Hole	5	3.4	95	5	092330
 ConnectTite Liner Bottom Hole	5	3.4	95	5	092331
 Split, straight-through liner	5	3.4	95	5	092064
 Splitless straight-through liner	5	2.6	95	5	0920861
 Split / Splitless with Single Taper	5	3.4	95	5	092071
 Split / Splitless with middle gooseneck	5	3.4	95	5	092077
 Split / Splitless with recessed gooseneck and quartz wool	5	3.4	95	5	092061
 Split / Splitless with middle gooseneck	5	3.4	95	5	092085
 ConnectTite™ (0.53 mm ID columns)	5	2.6	95	5	092087
 SPME Liner	5	0.75	95	5	092089
<b>For GC-14(SPL-14 Injector)</b>					
 Split / Splitless FocusLiner	5	3.4	99	5	092065
 Split / Splitless Taper FocusLiner	5	3.4	99	5	092066
 Split / Splitless with 2.0 mm middle gooseneck	5	3.4	99	5	092082
 Split / Splitless with single taper	5	3.4	99	5	0920831
 Splitless, Direct, wide bore liner for Shimadzu 9A/16A GC	5	3.4	139	5	092084

\* When using a standard 42 mm needle for autosamplers, the sample will be injected on top of the wool for this liner.



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

### O-rings and Sealing Rings

Description	Usage	Pack Size	Part No.
Viton O-ring	Temperatures up to 300 °C. For 2010 & 2014 (SPL-2010 Injector & SPL-2014 Injector).	10	0726533
Graphite Sealing Ring	Temperatures up to 450 °C. For 14, 15A & 16 (SPL-14 injector).	10	0726001
Graphite Sealing Ring	Temperatures up to 450 °C. For 17A (SPL-17 injector).	10	0726007



## SilTite® FingerTite Ferrules

Description	Column ID	Ferrule ID	Pack Size	Part No.
SilTite FingerTite Shimadzu 2010 INJ / FID Starter Kit	0.1-0.25 mm	0.4 mm	*	073619
SilTite FingerTite Shimadzu 2010 INJ / MS Starter Kit	0.1-0.25 mm	0.4 mm	*	073618
SilTite FingerTite Shimadzu 2010 INJ / FID Starter Kit	0.53 mm	0.7 mm	*	07362053
SilTite FingerTite Shimadzu 2010 Injector Starter Kit	0.53 mm	0.7 mm	*	07362054
SilTite FingerTite Shimadzu 17A INJ / FID Starter Kit	0.53 mm	0.7 mm	*	07362853
SilTite FingerTite Shimadzu 17A Injector Starter Kit	0.53 mm	0.7 mm	*	07362854
<b>Replacement Parts</b>				
SilTite FingerTite Ferrule 0.4 mm	0.1-0.25 mm	0.4 mm	10	073630
SilTite FingerTite Ferrule 0.5 mm	0.32 mm	0.5 mm	10	073631
SilTite FingerTite Ferrule 0.7 mm	0.53 mm	0.7 mm	10	073632
SilTite FingerTite Ferrule Blanking	–	–	2	073633
SilTite FingerTite Female Nut	–	–	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. In addition there are five SilTite FingerTite nuts, ten SilTite FingerTite ferrules, and a ferrule install tool which allows you to seat the ferrule in the correct position on the capillary column.



## Ferrules

Column ID	Description	Pack Size	Part No.
<b>GC14A, GC17A, GC2010 and GC2014 Detector / Injectors (Not for MS interfaces or QP2010 Injector)</b>			
0.10-0.32 mm ID columns	100% Graphite	10	0726080
0.45-0.53 mm ID columns	100% Graphite	10	0726082
5 mm OD packed columns	100% Graphite	10	0726001
0.10-0.25 mm ID columns	SilTite Metal - Initial Installation	10*	073350
0.10-0.25 mm ID columns	SilTite Ferrules	10	073227
0.32 mm ID columns	SilTite Metal - Initial Installation	10*	073351
0.32 mm ID columns	SilTite Ferrules	10	073228
0.45-0.53 mm ID columns	SilTite Metal - Initial Installation	10*	073352
0.53 mm ID columns	SilTite Ferrules	10	073229
n/a	SilTite Metal Nuts - Slotted	5	073232
<b>QP5000/5050 Standard MS Interface</b>			
QP5000-I 0.10-0.25 mm ID columns	15% Graphite/ 85% Vespel® Ferrules	10	0726563
QP5000-I 0.32 mm ID columns	15% Graphite/ 85% Vespel® Ferrules	10	0726564
QP5000-II & QP5050 0.10-0.25 mm ID columns	15% Graphite/ 85% Vespel® Ferrules	10	0726561
QP5000-II & QP5050 0.32 mm ID columns	15% Graphite/ 85% Vespel® Ferrules	10	0726562
0.10-0.25 mm ID columns	SilTite Metal - Initial Installation	10*	073204
0.10-0.25 mm ID columns	SilTite Ferrules	10	073227
0.32 mm ID columns	SilTite Metal - Initial Installation	10*	073205
0.32 mm ID columns	SilTite Ferrules	10	073228
0.53 mm ID columns	SilTite Ferrules	10	073229
n/a	SilTite Metal Nuts - QP5000/5050 Standard MS interface	5	073233
<b>QP5000/5050 Wide Bore MS Interface, QP2010 Injector and QP2010 Standard MS Interface</b>			
0.10-0.25 mm ID columns	15% Graphite/ 85% Vespel® Ferrules	10	072663
0.32 mm ID columns	15% Graphite/ 85% Vespel® Ferrules	10	072654
0.45-0.53 mm ID columns	15% Graphite/ 85% Vespel® Ferrules	10	072655
0.10-0.25 mm ID columns	SilTite Metal - Initial Installation	10*	073200
0.10-0.25 mm ID columns	SilTite Ferrules	10	073220
0.32 mm ID columns	SilTite Metal - Initial Installation	10*	073201
0.32 mm ID columns	SilTite Ferrules	10	073221
0.45-0.53 mm ID columns	SilTite Metal - Initial Installation	10*	073202
0.45-0.53 mm ID columns	SilTite Ferrules	10	073222
n/a	SilTite Metal Nuts	5	073224
<b>Replacement SilTite® Nuts</b>			
2010 GC-MS System		5	073224
2010 GC-MS System with QP5000 series MS		5	073224
2010/2014 GC Injectors and atmospheric detectors		5	073224
QP5000 Jet Separator MS Interface		5	073224
QP5000 Direct MS Interface		5	073233
All Injectors Jet Separator (Starter Kit), except 2010/2014		5	073232



\* Includes ten ferrules, two SilTite nuts.

# Thermo Scientific

## GC Supplies - Instrument Quick Pick Guide

### Autosampler Syringes

#### Thermo Scientific / CE Instruments / Fisons

All needles have a cone tip style.

Autosampler				Syringe Specifications				Syringe Code	Plunger Stop	Syringe Part No.	Needle Part No.	Pack Size
TriPlus	AS3000	AS2000	AS200/800	Volume	Length (mm)	Gauge (OD mm)						
<b>Fixed Needle</b>												
•				10 µL	50	23 (0.63)	10F-C/T-GT-5/0.63C	✓	002987	-	-	
•		•		10 µL	50	23 (0.63)	10F-BT-GT-5/0.63C		0029871	-	-	
•		•		10 µL	80	23 (0.63)	10F-BT-8/0.63C		0029891	-	-	
•				10 µL	80	26 (0.47)	10F-C/T-8/0.47C	✓	002992	-	-	
•		•		10 µL	80	26 (0.47)	10F-BT-8/0.47C		0029921	-	-	
•				10 µL	50	23 (0.63)	10F-C/T-5/0.63C	✓	002981	-	-	
•	•	•	•	10 µL	50	23 (0.63)	10F-VA8400/BT-5/0.63C		002951	-	-	
•				10 µL	50	26 (0.47)	10F-C/T-5/0.47C	✓	002980	-	-	
•	•	•	•	10 µL	50	26 (0.47)	10F-BT-5/0.47C		0029801	-	-	
<b>Removable Needle</b>												
•				10 µL	50	26 (0.47)	10R-C/T-5/0.47C	✓	002982	037010	2	
•	•	•		10 µL	50	26 (0.47)	10R-BT-GT-0.47C		0029851	037010	2	
•				10 µL	50	23 (0.63)	10R-C/T-5/0.63C	✓	002984	037787	2	
•	•	•	•	10 µL	50	23 (0.63)	10R-BT-0.63C		0029841	037787	2	
•				10 µL	80	26 (0.47)	10R-C/T-8/0.47C	✓	002993	031535	3	
•		•	•	10 µL	80	26 (0.47)	10R-BT-8/0.47C		0029931	031535	3	

### Septa

Choose from a number of different septa types:



- 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 injections 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 (mm)	Type	Pack Size	Part No.
<b>For TRACE 1300</b>			
11	GP	48	041826
11	EC	25	041902
11	MN	48	041856
11	HT	25	041898
<b>For TRACE 1300 and Focus</b>			
17*	EC	24	041903
17*	MN	24	0418505
17*	HT	24	0418990

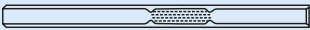

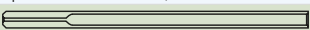


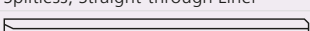

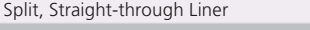
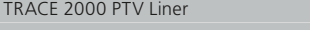
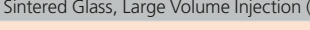



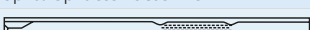
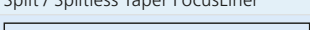
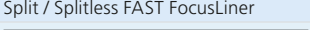
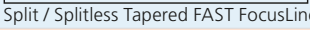

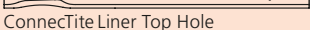

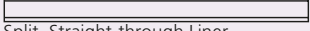

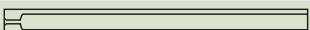
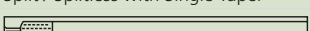
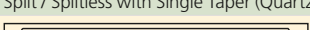

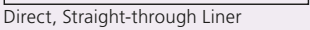

\* Maximum temperature for the Thermo septa diameter 17 mm is 330 °C.

### Inlet Liners

Description and Geometry	OD (mm)	ID (mm)	Length (mm)	Pack Size	Part No.
<b>For TRACE and Focus</b>					
 Splitless FocusLiner (for use with 70 mm Needle)	8	5	105	5	092045
 Splitless FocusLiner with Top-end Restriction (for use with 70 mm Needle)	8	5	105	5	092046
				25	09204625



## Inlet Liners Continued

Description and Geometry	OD (mm)	ID (mm)	Length (mm)	Pack Size	Part No.
 Split FocusLiner (for use with 50 mm Needle)	8	5	105	5	092048
 Splitless FocusLiner (for use with 50 mm Needle)	8	5	105	5	092049
 Splitless with Single Taper	8	3	105	5	092141
 Splitless with Single Taper	8	5	105	5	092144
 Splitless, Straight-through Liner	8	3	105	5	092147
 SPME Liner	8	0.8	105	5	092148
 Split, Straight-through Liner	8	5	105	5	092150
 TRACE 2000 PTV Liner	2.75	1.75	120	5	092142
 Sintered Glass, Large Volume Injection (LVI) Liner	2.75	0.78/1.8	120	5	092155
 ConneCTite Liner Standard	8	5	105	5	092334
 ConneCTite Liner Top Hole	8	5	105	5	092335
 ConneCTite Liner Bottom Hole	8	5	105	5	092336
<b>For TRACE 1300</b>					
 Split / Splitless FocusLiner	6.3	4	78.5	5	092002
				25	092219
 Split / Splitless Taper FocusLiner	6.3	4	78.5	5	092003
				25	092011
 Split / Splitless FAST FocusLiner	6.3	2.3	78.5	5	092005
				25	092008
 Split / Splitless Tapered FAST FocusLiner	6.3	2.3	78.5	5	092111
				25	092115
 ConneCTite Liner Standard	6.3	4	78.5	5	092324
 ConneCTite Liner Top Hole	6.3	4	78.5	5	092325
 ConneCTite Liner Bottom Hole	6.3	4	78.5	5	092326
 Split, Straight-through Liner	6.3	4	78.5	5	092007
				25	092222
 Split, with Quartz Wool	6.3	4	78.5	5	092001
				25	092220
 Split / Splitless with Single Taper	6.3	4	78.5	5	092017
				25	092229
 Split / Splitless with Single Taper (Quartz Wool)	6.3	4	78.5	5	092019
				25	092218
 Split / Splitless with Double Taper	6.3	4	78.5	5	092018
				25	092230
 Direct, Straight-through Liner	6.3	1.2	78.5	5	092016
				25	092224
 Split / Splitless Quartz, Straight-through Liner	6.1	2	78.5	5	092004
 Splitless with Recessed Gooseneck	6.3	2	78.5	5	092013
 Split / Splitless Recessed Gooseneck (Quartz Wool)	6.3	4	78.5	5	092010
				25	092223



-  Taper / Gooseneck
-  FocusLiner
-  Taper FocusLiner
-  ConneCTite
-  Straight
-  Double Taper
-  PTV/LVI

# Thermo Scientific

## GC Supplies - Instrument Quick Pick Guide

### O-rings and Sealing Rings

Description	Usage	Pack Size	Part No.
<b>For 8000 &amp; TRACE GCs</b>			
Graphite Sealing Ring	8 mm ID. Temperatures up to 450 °C. Suitable for use with liners 092004 and 09200401.	10	0726004
<b>For TRACE 1300</b>			
Viton O-Ring	Temperatures up to 300 °C. Suitable for liners with OD of 6.3 mm.	10	0726532
Graphite Sealing Ring	Temperatures up to 450 °C. Suitable for all inlet liners above except 092004 and 09200401.	10	0726005
Graphite Sealing Ring	Temperatures up to 450 °C. Suitable for use with liners 092004 and 09200401.	10	0726006

### SilTite® FingerTite Ferrules

Description	Column ID	Ferrule ID	Pack Size	Part No.
SilTite FingerTite Thermo Injector/FID Starter Kit	0.1-0.25 mm	0.4 mm	*	073614
SilTite FingerTite Thermo Injector/GC-MS ISQ Starter Kit	0.1-0.25 mm	0.4 mm	*	073615
SilTite FingerTite Thermo Injector/GC-MS Starter Kit	0.1-0.25 mm	0.4 mm	*	073616
SilTite FingerTite Thermo Injector/FID Starter Kit	0.53 mm	0.7 mm	*	07361453
SilTite FingerTite Thermo Injector Starter Kit	0.53 mm	0.7 mm	*	07361454
<b>For TRACE 1300</b>				
SilTite FingerTite INJ / FID Starter Kit	0.1-0.25 mm	0.4 mm	*	073610
SilTite FingerTite Capillary / FID Starter Kit	0.1-0.25 mm	0.4 mm	*	073611
SilTite FingerTite INJ / MS Starter Kit	0.1-0.25 mm	0.4 mm	*	073612
<b>Replacement Parts</b>				
SilTite FingerTite Ferrule 0.4 mm	0.1-0.25 mm	0.4 mm	10	073630
SilTite FingerTite Ferrule 0.5 mm	0.32 mm	0.5 mm	10	073631
SilTite FingerTite Ferrule 0.7 mm	0.53 mm	0.7 mm	10	073632
SilTite FingerTite Ferrule Blanking	–	–	2	073633
SilTite FingerTite Female Nut	–	–	5	073636
SilTite FingerTite INJ Base Seal	0.1-0.25 mm	–	2	073640
SilTite FingerTite MS Adaptor	–	–	1	0736102
SilTite FingerTite Injector	0.1-0.25 mm	–	1	0736104

\* Each starter kit includes all the parts necessary to convert one GC system (one injector and one detector) to the SilTite FingerTite system. In addition there are five SilTite FingerTite nuts, ten SilTite FingerTite ferrules, and a ferrule install tool which allows you to seat the ferrule in the correct position on the capillary column.



### Ferrules

Description	Column ID	Ferrule ID	Pack Size	Part No.
<b>SilTite® Metal Ferrules</b>				
For GC-MS Interface Connections (Starter Kit)	0.1-0.25 mm	0.4 mm	10*	073450
	0.32 mm	0.5 mm	10*	073451
	0.53 mm	0.8 mm	10*	073452
For TRACE 1300 Split / Splitless Injectors (Starter Kit)	0.1-0.25 mm	0.4 mm	10#	073270
	0.32 mm	0.5 mm	10#	073271
	0.45-0.53 mm	0.8 mm	10#	073272
	1/32"	0.81 mm	10#	073273

## Ferrules Continued

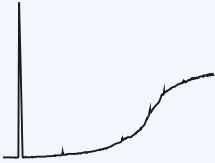
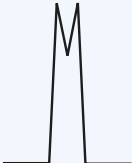

Description	Column ID	Ferrule ID	Pack Size	Part No.
<b>15% Graphite / 85% Vespel® Ferrules</b>				
For All Injectors & Detectors (Not for 8000 Series, Focus, TRACE/ Ultra GC)	0.1-0.25 mm	0.4 mm	10	0726549
	0.32 mm	0.5 mm	10	0726557
	0.53 mm	0.8 mm	10	0726548
	1/8" OD Packed Columns	1/8"	10	072669
	1/4" OD Packed Columns	1/4"	10	072667
For All Focus, Trace/Ultra Injectors & Detectors at atmospheric pressure e.g. FID (Not for GC-MS)	0.1-0.25 mm	0.4 mm	10#	072696
	0.32 mm	0.5 mm	10#	072697
	0.53 mm	0.8 mm	10#	072698
Brass Nut for Focus, Trace/ Ultra GC Injectors & Non-MS Detectors			2	1034085
For TRACE 1300 Injectors & Detectors at atmospheric pressure e.g. FID	0.1-0.25 mm	0.4 mm	10	073109
	0.32 mm	0.5 mm	10	073111
	0.53 mm	0.8 mm	10	073113
	for 1/8" OD Packed Columns	1/8"	10	072669
	for 1/4" OD Packed Columns	1/4"	10	072667
For TRACE 1300 GC-MS Interface Connection	0.1-0.25 mm	0.4 mm	10	072663
	0.32 mm	0.5 mm	10	072654
	0.53 mm	0.8 mm	10	072655
<b>100% Graphite Ferrules</b>				
For Injectors & Detectors at atmospheric pressure e.g. FID (Not for GC-MS)	0.1-0.32 mm	0.5 mm	10	072619
	0.45-0.53 mm	0.8 mm	10	072614
	1/8" OD Packed Columns	1/8"	10	072622
	1/4" OD Packed Columns	1/4"	10	072621
For TRACE 1300 Injectors & Detectors at atmospheric pressure e.g. FID (Not for GC-MS)	0.1-0.32 mm	0.5 mm	10	072635
	0.45-0.53 mm	0.8 mm	10	072636
	for 1/8" OD Packed Columns	1/8"	10	072602
	for 1/4" OD Packed Columns	1/4"	10	072601
<b>Replacement SilTite® Metal Ferrules</b>				
For All GC-MS Interface Connections	0.1-0.25 mm	0.4 mm	10	073330
	0.32 mm	0.5 mm	10	073331
	0.53 mm	0.8 mm	10	073332
	1/32"	0.81 mm	10	073333
For TRACE 1300 Connections	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>				
SilTite Metal Nuts	–	–	5	073230
For TRACE 1300 GC-MS Interface Connection	–	–	5	073224
For TRACE 1300 Split / Splitless Injector	–	–	5	073226
<b>Replacement SilTite® Base Seals</b>				
For TRACE 1300 Split / Splitless Injector	–	–	2	073400
	–	–	10	073401





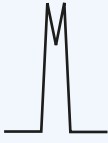
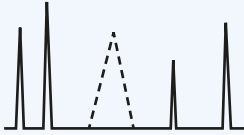

\* Includes 10 ferrules, 2 SilTite nuts. # To be used in combination with brass nut (Part No. 1034085)

# Expert Tips

## GC Supplies - Instrument Quick Pick Guide

Problem	Resolution
<b>No Column Flow</b>	Check carrier gas flow and adjust. Replace septum/injector seal with EC septum. Visually check column integrity i.e. is it broken? Remove section if small enough or replace column.
<b>High Column Bleed</b> 	Check published maximum temperature. Check carrier flow rates / velocity, correct for column/length – adjust if necessary. Check column has not moved in detector. Check for leaks produced during initial heating. Check oxygen filter is not spent – replace if necessary. Make sure detector temperature is higher than final column temperature if possible. Check cleanliness of detector – clean if necessary. Recondition column – re-run conditioning program. Cut 50 cm from the front end of the column.
<b>Retention Time Shifts</b>	Check temperature program. Check injector temperature. Ensure manual injection technique is consistent. Check carrier gas flow rate / velocity. Check for injector leaks. Ensure same solvent being used. Column is contaminated - rinse or replace. Remove 50 cm from front of column. Phase breakdown – replace column.
<b>Poor Resolution or Loss of Resolution</b> 	Use correct column or phase. Use different temperature program. Check injector temperature – is it correct for solvent and analytes. Check injection technique. Check carrier flow / velocity. Sample overload - dilute or change split ratio. Contaminated column – rinse or replace. Phase breakdown – replace column.
<b>Phase Breakdown</b>	Check for leaks and repair. Check oxygen traps and replace if necessary. Exceeded upper temperature limit of column for extended periods – replace column. Column contamination – replace column (perform extra clean up of samples). Damage due to sample – do not inject strong acid or base samples.
<b>Poor or No Detector Response For All Peaks</b> 	Correct injection technique for concentration of analyte. Check proper liner is used for injection technique. Check syringe needle not blocked or plunger is not leaking. Check split ratio if using split technique. Check injector temperature is correct. Check detector temperature is correct. Check flow rates of detector gas(es). Error in sample concentration – verify concentrations.
<b>Detector Problems</b>	PID - Dirty window – clean according to manufacturer's specifications. ELCD - Faulty reactor tube. - Contaminated alcohol. - Incorrect alcohol flow rate. ECD - Impurities in nitrogen. - Dirty detector; clean (bake) according to manufacturer's specifications. NPD - Bad bead. FID - Partially blocked jet. FPD - Incorrect gas flow rates. - Incorrect filter installed. - Clean filter. TCD - Balance flow rates.

## Poor Peak Shape

Problem	Reason	Resolution
<b>Peak Fronting</b> 	Column overload.	Reduce sample concentration or injection volume.
	Incorrect polarity of column for compound.	Use correct column.
<b>Peak Tailing</b> 	Column is active.	Remove first meter of column; recheck; replace column if necessary.
	Active inlet liner.	Replace liner with clean, deactivated liner.
	Incorrect column for analysis.	Use correct column.
	Incorrect column installation.	Check inlet and outlet connections, and for any cold spots.
<b>Split Peaks</b> 	Poor injection technique.	Refine injection technique.
	Mixed solvents.	Use only single solvent system.
	Poor resolution.	Use different column or change temperature profile.
<b>Ghost Peaks</b> 	Run GC without injection; if ghost peaks disappear then the problem is probably the syringe or solvent; if ghost peaks are still evident then the problem is either the septum or the breakdown of the phase.	
	Contaminated syringe or solvents.	Clean syringe thoroughly and replace solvents.
	Septum bleed.	Replace with new EC septum.
	Breakdown of column phase.	Choose different phase which restricts breakdown.
	Too large an injection volume.	Decrease injection volume.
<b>Specific Peaks Low Response</b> 	Column is active.	Remove first meter of column; recheck; replace column if necessary.
	Active inlet liner.	Replace liner with clean, deactivated liner.
	Incorrect calculation of sample.	Verify calculations.
	FID altered gas flows.	Readjust gas flows.

# GC Supplies - Instrument Quick Pick Guide

Choose for Your Instrument



SGE Analytical Science (SGE) is a world renowned brand for components and consumables used in scientific analysis.

Primarily in the field of scientific glass engineering for liquid handling and separation science, since its beginnings in 1960, SGE has become the global market leader in niche areas such as autosampler syringes and GC inlet liners.

Completing the transition into Trajan after acquisition in 2013, SGE products make up a solid foundation of Trajan's portfolio and will continue to be created and supported by Trajan customer service and distribution networks worldwide.