SGE Analytical Science

Choose for Your Instrument

GC Supplies - Bruker (Varian) Instrument Quick Pick Guide

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

A TRAJAN Company

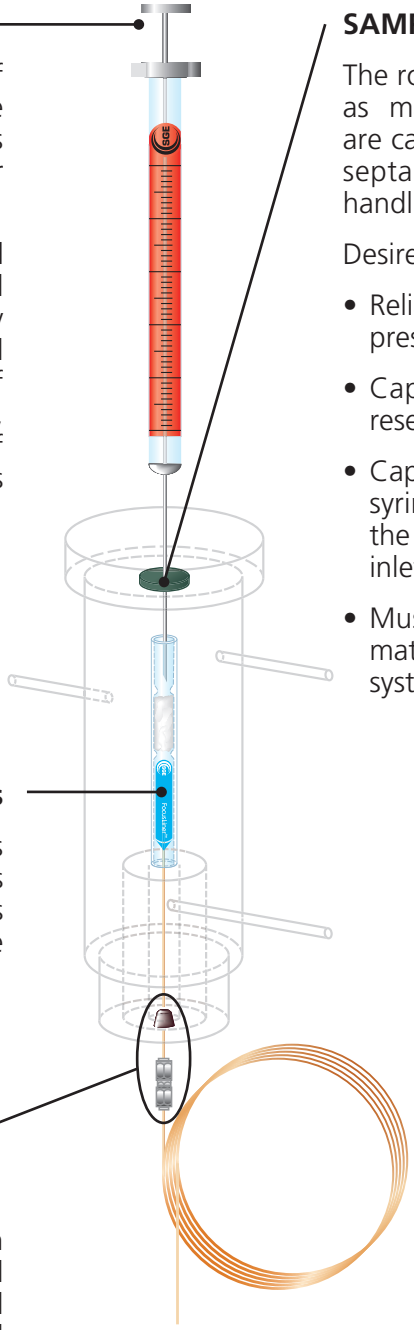
Your chromatography analysis does not end with the selection of the GC column. The combination of components selected for your instrument also make an important contribution to successful separations. SGE brings technology and chromatography expertise to improve your chromatography.

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 - 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.

SAMPLE INTRODUCTION – GC Inlet Liners

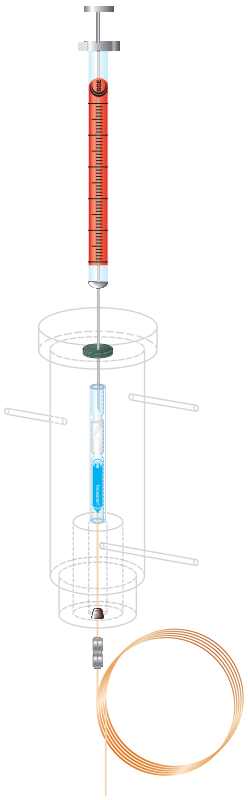
The GC Inlet liner is where the sample is introduced and vaporized into the gaseous phase. The design of the liner is crucial, as is liner deactivation, to ensure reproducible and accurate chromatography.

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.

Instrument Quick Pick for Bruker (Varian)

Autosampler Syringes



Volume	Length	Needle Gauge (OD mm)	Tip Style	Syringe Code	Syringe Part No.	Pack Size	Needle Part No.	Pack Size	Plunger Part No.	Pack Size
Bruker (Varian) 8035, 8100 and 8200										
Removable Needle										
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
Needle Alternatives for P/N 002924										
	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	–	–
100 µL Gas Tight	53	25 (0.5)	S/Hole	100R-GT-VA8X	005921	1	038745	1	031824	1
Bruker (Varian) CP-8400/8410, CP-9010/9050										
Fixed Needle										
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	–	–	–	–
Removable Needle										
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

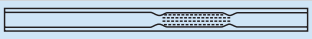
SGE has a number of different septa materials:

- 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.

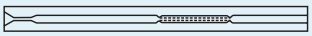
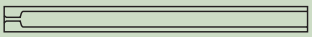
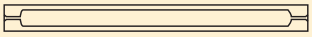
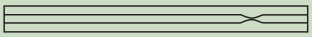
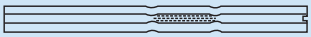
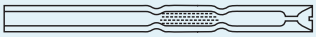
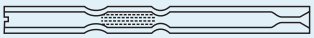
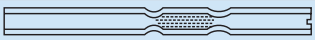
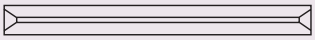
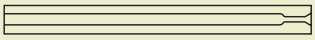
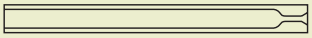
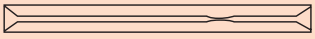
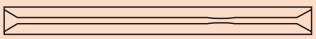
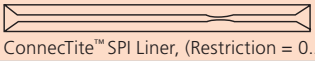
Type	Material	Durability	Resealing	Solvent Resistance	Tear Resistance	Maximum Temperature
GP	Silicone	Good	Good	Excellent	Good	200 °C
EC	High Temperature Silicone	Excellent	Excellent	Excellent	Excellent	400 °C
MN	High Temperature Silicone	Excellent	Excellent	Excellent	Excellent	400 °C
HT	BTO Silicone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

Diameter	Material	Pack Size	Part No.
For Varian / Bruker 1177 Injector			
9	GP	50	041824
9	EC	25	041900
9	MN	50	041854
9	HT	25	041896
For Varian / Bruker 1040, 1041, 1060, 1061 injector			
9.5	GP	50	0418240
9.5	EC	25	041901
9.5	HT	50	041897
For Varian / Bruker 1040, 1041, 1060, 1061 injector			
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.
For 1177 Injector					
 Split / Splitless FocusLiner™	6.3	4	78.5	5	092002
				25	092219
 Split / Splitless Tapered FocusLiner™	6.3	4	78.5	5	092003
				25	092011
 Split / Splitless FAST FocusLiner™	6.3	2.3	78.5	5	092005
				25	092008

Inlet Liners Continued

Description and Geometry Sketch	OD (mm)	ID (mm)	Length (mm)	Pack Size	Part no.
 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
 Split / Splitless Recessed Gooseneck (quartz wool)	6.3	4	78.5	5	092010
				25	092223
For 1075/1077 Injector					
 Split, FAST FocusLiner™	6.3	2.3	72	5	092113
 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	5	092026
 Split, Tapered FocusLiner™	6.3	4	72	5	092025
 Splitless, Slots at Both Ends	6.3	2	74	5	092024
				25	092228
 Split FocusLiner™	6.3	4	72	5	092022
For 1078/1079 Injector					
 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 Tapered FocusLiner™	5	3.4	54	5	092036
For 1093/1094 Injector					
 ConnecTite™ SPI Liner, (Restriction = 0.25 mm)	4.6	0.5	54	5	092027
 ConnecTite™ SPI Liner, (Restriction = 0.5 mm) for 0.53 mm ID On-column	4.6	0.8	54	5	092034
 ConnecTite™ SPI Liner, (Restriction = 0.25 mm)	4.6	0.8	54	5	092030

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

O-rings and Sealing Rings

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

SilTite® FingerTite Ferrules

Description	Column ID	Ferrule ID (mm)	Pack Size	Part No.
SilTite FingerTite Bruker (Varian) Injector/GC-MS Starter Kit	0.1-0.25 mm	0.4	*	073619
SilTite FingerTite Bruker (Varian) Injector/FID Starter Kit	0.1-0.25 mm	0.4	*	073618
SilTite FingerTite Ferrule 0.4 mm	0.1-0.25 mm	0.4	10	073630
SilTite FingerTite Ferrule 0.5 mm	0.32 mm	0.5	10	073631
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 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	Ferrule ID	Pack Size	Part No.
15% Graphite / 85% Vespel® Ferrules				
For 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
100% Graphite Ferrules				
For 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
SilTite Metal Ferrules				
For 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
	1/32"	0.81 mm	10*	073303
Nuts for Varian Injector				
			2	1034060
Replacement SilTite Ferrules				
For 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
Replacement SilTite Nuts				
			5	073231

**Includes ten ferrules, two SilTite nuts.*