

## Autosampler Syringes



Ordering Information				
Volume, Code, Gauge, Length, Point Style	QTY	OEM No.	Thermo No.	Part No.
<b>Hamilton Syringes</b>				
10µL, N, 26s, 80mm, Cone for AS 200, TriPlus	1	202066	36502019	24-202066
5µL, N, 26s, 50mm, Cone for AS 2000/3000	1	204051	36500505	24-204051
10µL, N, 26s, 50mm, Cone for AS 2000/3000	1	204052	365D3711	24-204052
<b>SGE Syringes</b>				
10µL, F, 26s, 80mm, Cone for AS 200, TriPlus	1	002992	36502019	21-002992
10µL, R, 26s, 80mm, Cone for AS 200/800	1	002993		21-002993
10µL, F, 26s, 50mm, Cone for AS 2000/3000	1	002980	365D3711	21-002980
10µL, R, 26s, 50mm, Cone for AS 2000/3000	1	002982	365D1841	21-002982
Needles 10µL, 26s, 80mm, Cone	1	031535		21-031535
Needles 10µL, 26s, 50mm, Cone	1	037785		21-037785

Needle Termination Codes	
<b>Hamilton</b>	
N	Cemented Needle
<b>SGE</b>	
F	Fixed Needle
R	Removable Needle



Point Style Cone  
Cone tip

## Septum Nut



Septum nut provides consistent septum tightness, fewer bent needles, and easy leak detection. The nut contains a needle guide, ensuring that the needle consistently penetrates the septum in the same place, prolonging septum life. The guide also prevents the needle from striking the edge of the column or bending during insertion.

### Septum Nuts for Thermo Trace GCs

- Ensure a leak-tight injection port, increase septum lifetime, and decrease maintenance requirements.
- Needle guide allows easy penetration and prevents septum coring.
- Manual injection septum nut allows use of 23-gauge needles for on-column injections.
- Made of high-quality stainless steel.
- Include septum port and holder.

Ordering Information			
Description	QTY	Thermo No.	Part No.
<b>Septum Nut for Varian</b>			
Septum Nut (for 23-Gauge Needles)	1		065B-0011

# Thermo Supplies/Parts

## Septa



### Premium CenterGuide™ Septa

Premium CenterGuide™ septa are premium silicone rubber precision molded for a more accurate fit in the injection port than inferior stamped septa. A small recess, the “CenterGuide”, is added in the center of the disk, as well as a small indentation around the outside diameter. The CenterGuide focuses the needle to the same point for each injection providing easy penetration, reduced needle bending and minimizing coring. The proprietary cleaning process after molding is used to provide lowest bleed. Premium septa offer the longest average injection lifetime at the highest injection port temperatures. Septa are carefully processed, then packaged in glass vials.

- **BTO® - Bleed and Temperature Optimized** - For highest temperature use, with lowest bleed and outstanding injection life. Ideal for use with “Mass Spec” capillary columns.
- **Marathon™** - For long injection life, minimal coring. Soft, 45 durometer, easy on autosampler
- **Advanced Green 3™** - Long life, plasma coating eliminates sticking in the injection port

### General Purpose Septa

General Purpose Septa are made from an enhanced injection-molded silicone rubber material. The septa material is specified to withstand over 200 automatic injections.

- **Ultrasep® R** septa are good low-bleed with a temperature setpoint of 350°C.
- **Economy Blue** Septa are designed for non-demanding, routine applications. Maximum temperature setpoint is 250°C.

Selection Guide	
Thermo	Diameter
TRACE GC	17mm
GCQ/TRACE,PTV	17mm
8000 Series	9.5mm
GC 9001	9.5mm
GCQ	9.5mm
QCQ	9.5mm
TRACE 2000	9.5mm

Specification						
Septa	Temp Max	Color	Injections	Durometer*	Low Bleed	
BTO	400°C	Red	>300	50-55	Excellent	
Marathon	350°C	Brick red	>400	45-50	Good	
Advanced Green 3	350°C	Green	>350	55-60	Very good	
Ultrasep R	350°C	Red	>200	45-55	Good	
Economy Blue	250°C	Blue	>200	40-45	Good	

\* Durometer : Hardness of the silicone material. The lower the number, the softer the material.

Ordering Information			
Description	QTY	Thermo No.	Part No.
<b>Thermo TRACE GC/GCQ/TRACE, PTV/8000 Series</b>			
BTO 17mm(21/32")	50	31303211	065C-0018
Marathon 17mm(21/32")	50		065C-0028
Advanced Green 17mm(21/32")	50	313A170T	065C-0038
<b>Thermo GC 9001/GCQ/QCQ/TRACE 2000</b>			
BTO 9.5mm(3/8")	50	31303240	065C-0048
Marathon 9.5mm(3/8")	50		065C-0058
Advanced Green 9.5mm(3/8")	50		065C-0068
Ultrasep R 9.5mm(3/8")	50	313S125A	065C-0078
Economy Blue 9.5mm(3/8")	50		065C-0088



## Liners



### Vertical® GC Liners

The Vertical® GC liners are made of borosilicate glass and designed to obtain the maximum performance to ensure no loss of sample and accurate quantitation of thermally labile or reactive compounds.

- Wide selection ranges
- Fit standard instrument manufacturer's inlets
- High temperature deactivation to ensure inertness

### SGE® FocusLiner™ GC Liners

The SGE® FocusLiner™ overcomes the quartz wool shifting problem. The quartz wool is held in the correct position by means of two tapered sections in the liner. The tapered sections are located to ensure that the needle tip penetrates the secured quartz wool plug wiping any residue liquid sample from the needle tip while providing sufficient surface area for volatilisation. With the SGE FocusLiner™, a good RSD is easily achievable showing the effectiveness of the secured quartz wool.

### Liner O-Rings

- Graphite O-rings can be used to 450°C with non bleed and superb durability.

Ordering Information						
Description, ID, OD and Length	Diagram	Application	QTY	Thermo No.	Part No.	
<b>ThermoQuest 8000, FOCUS, TRACE/ULTRA</b>						
Splitless, FocusLiner™, 70mm Needle 5mmID, 8mmOD, 105mmLength		trace analytes	5	453T2895	065G-0015	
		> 2µL	25	453T4895	065G-0017	
Splitless, FocusLiner™, 50mm Needle 5mmID, 8mmOD, 105mmLength		trace analytes	5	453T2999	065G-0025	
		> 2µL	25	453T4995	065G-0027	
Split, FocusLiner™, 50mm Needle 5mmID, 8mmOD, 105mmLength		trace analytes	5	453T2905	065G-0035	
		> 2µL	25	453T4905	065G-0037	
Split, Straight-Through 3mmID, 8mmOD, 105mmLength		trace analytes	5	45350031	065G-0045	
		< 2µL	25	45354031	065G-0047	
Split, Straight-Through 5mmID, 8mmOD, 105mmLength		trace analytes	5	45350030	065G-0055	
		> 2µL	25	45354030	065G-0057	
Splitless, Single-Taper 3mmID, 8mmOD, 105mmLength		trace analytes	5	45350032	065G-0065	
		< 2µL	25	45354032	065G-0067	
Splitless, Single-Taper 5mmID, 8mmOD, 105mmLength		trace analytes	5	45350033	065G-0075	
		> 2µL	25	45354033	065G-0077	
<b>TRACE 2000 PTV</b>						
PTV, LVI 2mmID, 2.75mmOD, 120mmLength		general	5	45352060	065G-0085	
		analytes	25		065G-0087	
PTV, 2mmID, 2.75mmOD, 120mmLength		general	5	45352057	065G-0095	
		analytes	25	45354057	065G-0097	
<b>MEGA 4000/5000/6000</b>						
Split, Straight-Through 3mmID, 5mmOD, 79.5mmLength		general	5	45350400	065G-0105	
		analytes	25		065G-0107	
Split/Splitless, Recessed Gossneck 3mmID, 5mmOD, 79.5mmLength		general	5	453T2955	065G-0115	
		analytes	25		065G-0117	
Split, Straight-Through 2mmID, 5mmOD, 79.5mmLength		general	5	45350300	065G-0125	
		analytes	25		065G-0127	
<b>Liner O-Rings</b>						
Graphite Rings and Washers for 8000 and Trace			10	29033460	065G-0146	

# Thermo Supplies/Parts

## Ferrules

Ferrule Properties			
Material	Temp Limit	Advantages	Limitations
Graphite (100%)	450°C	<ul style="list-style-type: none"> <li>Recommended for high temperature and cool on-column application</li> </ul>	<ul style="list-style-type: none"> <li>Not for MS</li> <li>Easily deformed</li> <li>Possible system contamination</li> </ul>
Vespel/Graphite (85%/15%)	350°C	<ul style="list-style-type: none"> <li>Excellent sealing</li> <li>Recommended for MS</li> </ul>	<ul style="list-style-type: none"> <li>Must re-tighten frequently</li> <li>Flows at elevated temperature</li> </ul>



M4 Graphite ferrules



M8 Graphite ferrules



85% Vespel, 15% Graphite ferrules

Ordering Information			
Description	QTY	Thermo No.	Part No.
<b>Graphite Ferrules</b>			
TRACE & FOCUS, M4 0.3mm, for 0.15mmID columns	10		065M-1016
TRACE & FOCUS, M4 0.4mm, for 0.25mmID columns	10	29053488	065M-1026
TRACE & FOCUS, M4 0.5mm, for 0.32mmID columns	10	29053487	065M-1036
TRACE & FOCUS, M4 0.8mm, for 0.53mmID columns	10	29053486	065M-1046
TRACE & FOCUS, M8 0.4mm, for 0.25mmID columns	10		065M-1056
TRACE & FOCUS, M8 0.5mm, for 0.32mmID columns	10		065M-1066
TRACE & FOCUS, M8 0.8mm, for 0.53mmID columns	10		065M-1076
1/8" Straight	10		065M-1086
1/4" Straight	10		065M-1096
<b>85% Vespel, 15% Graphite Ferrules</b>			
1/16" to 0.4mm, Short, for 0.1-0.25mmID columns	10	29033461	065M-2016
1/16" to 0.5mm, Short, for 0.32mmID columns	10	29033460	065M-2026
1/16" to 0.8mm, Short, for 0.53mmID columns	10	29033471	065M-2036
1/8" Straight	10	290VT168	065M-2046
1/4" Straight	10	290VT165	065M-2056
1/16" to 0.4mm, for 0.25mmID columns	10	290VT186	065M-2066
1/16" to 0.5mm, for 0.32mmID columns	10	290VT187	065M-2076
1/16" to 0.8mm, for 0.53mmID columns	10	290VT188	065M-2086
Brass nut	2	290BT239	065M-2092

GC Accessories

## SilTite Ferrules

- Metal ferrules for fused silica GC columns and tubing
- Ideal for GC/MS
- Eliminate contamination from vespel or graphite
- Eliminate annoying leaks
- Reduce air background
- No more retightening of Vespel ferrules after temperature cycling
- Reduce GC and MS down time



SilTite nuts and ferrules

Ordering Information			
Description	QTY	Thermo No.	Part No.
<b>SilTite Ferrules Kit : 10 Ferrules, 2 Nuts</b>			
For 0.10 to 0.25mmID Columns	1	290MT229	065M-6011
For 0.32mmID Columns	1	290MT230	065M-6021
For 0.45 to 0.53mmID Columns	1	290MT231	065M-6031
<b>Replacement</b>			
SilTite Ferrules 0.4mm for 0.1 to 0.25mmID Columns	10	290MT221	065M-6046
SilTite Ferrules 0.5mm for 0.32mmID Columns	10	290MT222	065M-6056
SilTite Ferrules 0.8mm for 0.53mmID Columns	10	290MT223	065M-6066
SilTite Nuts	5	290MT211	063M-6075