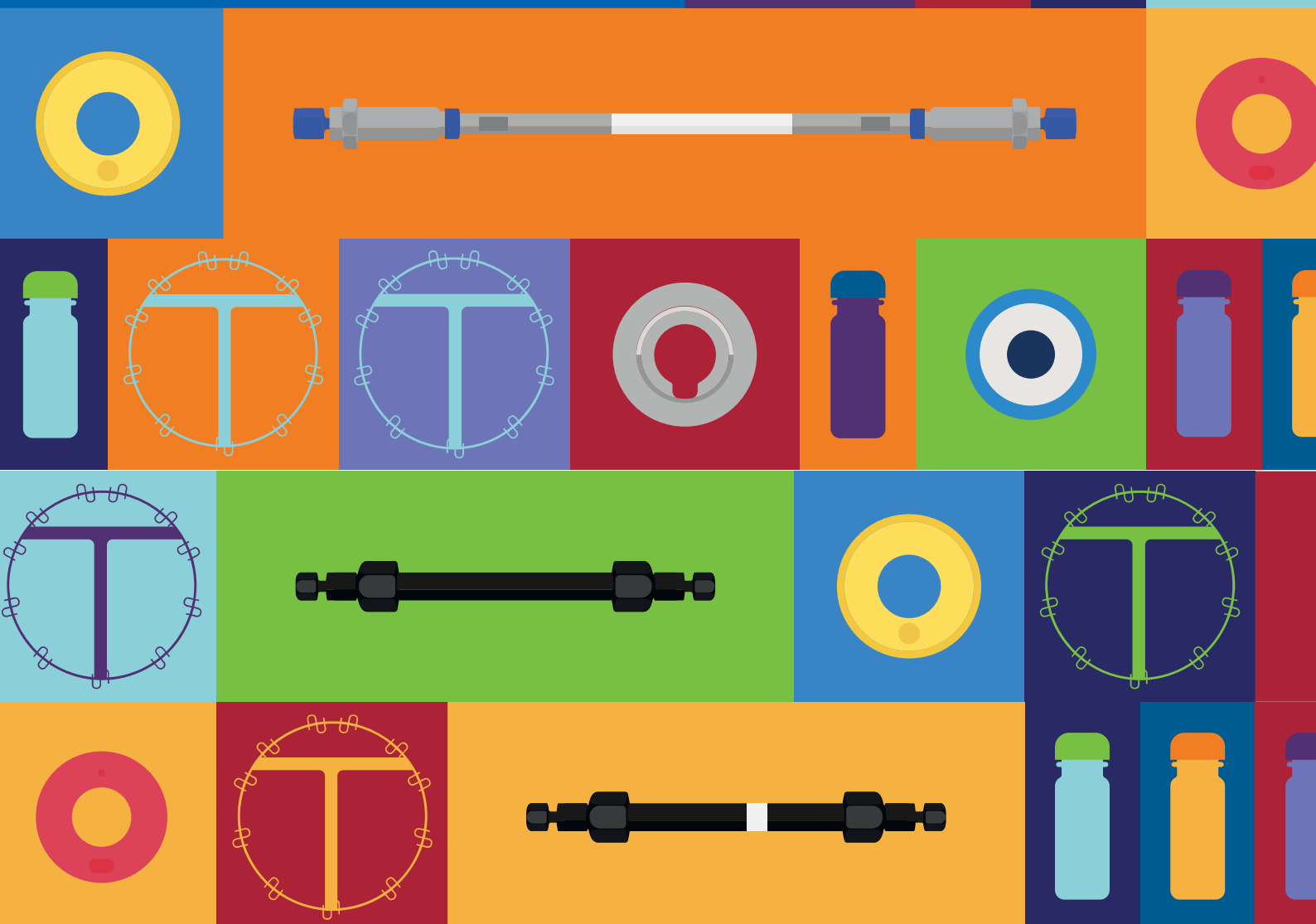


thermo scientific



Connected chromatography solutions

2019/2021 Chromatography Consumables Catalog

ThermoFisher
SCIENTIFIC

Gas management

Thermo Scientific™ Click-On™ inline filters

Easy-to-use format eliminates contamination

- Pure gas output 99.9999% or 6.0 grade
- No carrier gas line contamination during filter change
- Easy and fast replacement without the need for tools
- TUEV approved
- Maximum pressure 11 bar (160 psi)
- Maximum flow 25L/min



Filters	For Gas	Indicator Change	Filter Capacity (Click-On Inline)	Filter Capacity (Super Clean)
Moisture	Inert carrier, He, H ₂ , N ₂ , AR, Air		21g H ₂ O	7.2g H ₂ O
Oxygen	Inert carrier, He, H ₂ , N ₂ , AR		3L O ₂	1L O ₂
Hydrocarbon	Inert carrier, He, H ₂ , N ₂ , AR, Air		36g (as n-butane)	24g (as n-butane)
Combi – Moisture, Oxygen	Inert carrier, He, H ₂ , N ₂ , AR		10g H ₂ O, 1.5L O ₂	–
Combi – Moisture, Hydrocarbons	Inert carrier, He, H ₂ , N ₂ , AR, Air		10g H ₂ O, 18g HCs (as n-butane)	3.5g H ₂ O, 12g HCs (as n-butane)
Triple – Moisture, Oxygen, Hydrocarbons	Inert carrier, He, H ₂ , N ₂ , AR		6g H ₂ O, 1L O ₂ , 12g HCs (as n-butane)	1.8g H ₂ O, 500mL O ₂ , 7g HCs (as n-butane)
Triple – Moisture, Oxygen, Hydrocarbons – He preconditioned for GC/MS	He		6g H ₂ O, 1L O ₂ , 12g HCs (as n-butane)	–
Indicating Triple – Moisture, Oxygen, Hydrocarbons – He preconditioned for GC/MS	He	Moisture: Yellow to Clear Oxygen: Green to Gray	0.1g H ₂ O, 100mL O ₂ , 0.07g HCs (as n-butane)	–

Click-on inline filters

Type	Cat No.	Quantity
Moisture Filter	60180-801	1 Each
Oxygen Filter	60180-802	1 Each
Hydrocarbon Filter	60180-803	1 Each
Combi – Moisture, Oxygen	60180-804	1 Each
Combi – Moisture, Hydrocarbons	60180-843	1 Each
Triple – Moisture, Oxygen, Hydrocarbons	60180-805	1 Each
Triple – Moisture, Oxygen, Hydrocarbons – He preconditioned for GC/MS	60180-806	1 Each
Indicating Triple – Moisture, Oxygen, Hydrocarbons – He preconditioned for GC/MS	60180-808	1 Each

Connectors and accessories

Description	Cat No.	Quantity
Brass End Fitting, 0.125in.	60180-809	2 Pack
Steel End Fitting, 0.125in.	60180-810	2 Pack
Brass End Fitting, 0.25in.	60180-811	2 Pack
Steel End Fitting, 0.25in.	60180-812	2 Pack
Double Ended Connector to connect Filter to Indicator	60180-813	1 Each
Replacement O-Rings	60180-833	1 Each
Wall Mounting Clamp	60180-834	4 Pack

Super clean cartridge filters

Replace easily without tools

- 99.9999% pure gas (or 6.0 grade) output
- No carrier gas line contamination during cartridge change
- Cost effective
- TUEV approved
- Max. pressure 11 bar (160 psi)
- Max. flow 7L/min



Super clean cartridge filters

Type	Base Included	Cat. No.	Quantity
Indicating Moisture Cartridge Filter	No	60180-819	1 Each
Indicating Oxygen Cartridge Filter	No	60180-820	1 Each
Hydrocarbon Cartridge Filter	No	60180-821	1 Each
Indicating Combi Filter – Moisture, Hydrocarbons	No	60180-826	1 Each
Indicating Triple Filter – Moisture, Oxygen, Hydrocarbons	No	60180-824	1 Each
Indicating Triple Filter – Moisture, Oxygen, Hydrocarbons – He preconditioned for GC-MS	No	60180-825	1 Each
Triple Filter – Moisture, Oxygen, Hydrocarbons – He preconditioned for GC-MS	Yes	60180-830	1 Each
Indicating Triple Filter – Moisture, Oxygen, Hydrocarbons – He preconditioned for GC-MS	Yes	60180-829	1 Each
3 Cartridge Pack – contains 1 x Triple Filter and 2 x Combi Filter (Moisture, Hydrocarbons)	No	60180-822	1 Each
4 Cartridge Pack – contains 1 x Moisture Filter, 1 x O ₂ Filter and 2 x Hydrocarbon Filter	Yes	60180-827	1 Each
3 Cartridge Pack – contains 1 x Triple Filter and 2 x Combi Filter (Moisture, Hydrocarbons)	Yes	60180-828	1 Each
High Flow Pack of 2 x Hydrocarbon Filters for LC-MS – no Indicator	No	60180-839	1 Each
High Flow Pack of 2 x Moisture Filters for LC-MS – with Indicator	No	60180-841	1 Each

Super clean cartridge filter baseplates

One-time installation procedure

- Can be configured to the individual user requirements
- Needle valves ensure gas line is not contaminated during cartridge change

Filters are not included



Type	For Use With	For Gas
Single Base	Triple Filter	Carrier Gas Only
Dual Base	2 x Combi Filter	Air and Fuel Gas
Triple Base	Triple and 2 x Combi Filter	Carrier, Make-Up, and Fuel Gas
Four-position Base	Moisture, Oxygen, 2 x Hydrocarbon	High Capacity Carrier, Fuel, Make Up
Two-position, High-flow Base	N ₂ in LC/MS, H ₂ O in H ₂ /air generators	Carrier, Make Up and Fuel

Super clean cartridge filter baseplates

Type	Cat. No.	Quantity
Single Base	60180-814	1 Each
Dual Base	60180-815	1 Each
Triple Base	60180-817	1 Each
Four-position Base	60180-818	1 Each
O-rings for Base Plates	60180-837	20 Pack
Flush Cap	60180-838	2 Pack

eVol XR dispensing system

Allows precise and accurate, operator-independent dispensing for better deployment of laboratory staff

- Can be calibrated easily by user to ensure validity of results
- Intuitive interface with touch wheel and full-color screen
- Complies to GLP and GMP protocols
- Improves confidence in reported results
- Unifies two precision devices, a digitally controlled electronic drive and an Thermo Scientific™ eVol™ XCHANGE™ analytical syringe
- Integrated XCHANGE coupling allows syringes to be quickly and easily changed
- XCHANGE syringes offer exceptional versatility and functionality



eVol XR dispensing system

Description	Cat. No.	Quantity
Sample Dispensing System	66002-020	1 Each
eVol XCHANGE Syringe 5µL	66002-021	1 Each
eVol XCHANGE Syringe 50µL	66002-022	1 Each
eVol XCHANGE Syringe 100µL	66002-038	1 Each
eVol XCHANGE Syringe 500µL	66002-023	1 Each
eVol XCHANGE Syringe 1000µL	66002-039	1 Each
Sample Dispensing System Kit*	66002-024	1 Each
eVol Stand	66002-025	1 Each
Charger for eVol System	66002-026	1 Each
Charging Stand for eVol System	66002-027	1 Each
Replacement Battery for eVol System	66002-028	1 Each
Replacement Plunger for 5µL eVol Syringe	66002-029	1 Each
Replacement Plunger for 500µL eVol Syringe	66002-031	1 Each
Replacement Plunger for 1000µL eVol Syringe	66002-041	1 Each

* Sample Dispensing Kit contains 1 eVol XR unit, 1x5µL, 1x50µL and 1x500µL syringe.

Applications:

- Routine dispensing of volatile solvents, hazardous, corrosive or viscous chemicals



Syringes for GC instruments

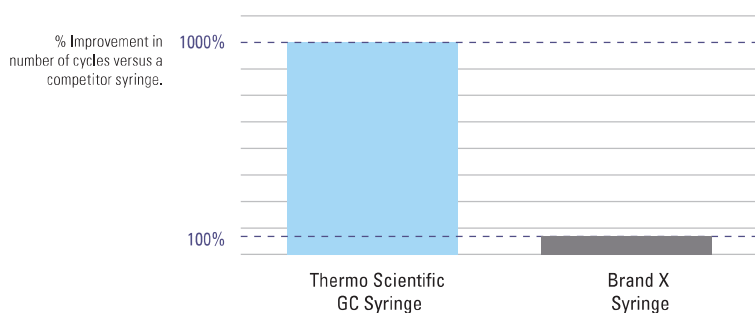
Providing durability, clarity and accuracy for your sample

Thermo Scientific syringes for GC instruments are designed to provide enhanced durability, clarity and accuracy in sample introduction. This gives confidence in analytical results, time-after-time.

Durability in your GC syringe

The enhanced design of the syringes delivers:

- Improved solvent resistance
- Greater temperature range
- Increased operational smoothness
- Longer lifetime and improved cycle life



Clarity in your GC syringe

Syringes are provided with a clear, easy-to-read black scale, which aids in consistent delivery of samples for manual syringes and easy identification of installed autosampler syringes.



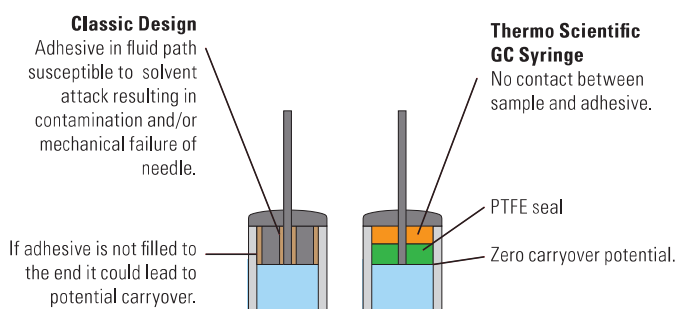
Accuracy in your GC syringe

The enhanced design of the syringe has eliminated areas where the sample can become trapped and potentially cause carryover:

- Closer fit between the plunger tip and PTFE insert at the zero position
- Tighter fit between PTFE insert and glass barrel
- Improved fixed needle attachment

In addition, the reduction in adhesive from the fluid path enhances durability and reduces the risk of sample interaction with the adhesive.

Fixed Needle Attachment



GC syringes for Thermo Scientific TriPlus RSH Autosampler

Removable needle syringes

Volume (µL)	Length (mm)	Gauge	Tip Style	Type	Cat. No.	Quantity	Repair Kit Cat. No.	Quantity
0.5	57	23	Cone	Split	365A0241*	1 Each	365RN617	1 Each
1	57	23	Cone	Split	365B0251*	1 Each	365RN656	1 Each

Fixed needle syringes

Volume (µL)	Length (mm)	Gauge	Tip Style	Type	Cat. No.	Quantity
5	85	23s	Cone	Merlin Valve SSL Injector: Splitless	365C0221	1 Each
	57	23s	Cone	SSL, PTV and Merlin Adapter	365C0231*	1 Each
	85	26s	Cone	Splitless and OC	365C0241	1 Each
	57	26s	Cone	SSL and PTV	365C0251*	1 Each
10	85	23s	Cone	Merlin Valve SSL Injector: Splitless	365D0261	1 Each
	57	23s	Cone	SSL, PTV and Merlin Adapter	365D0271*	1 Each
	85	26s	Cone	Splitless and OC	365D0281	1 Each
	57	26s	Cone	SSL and PTV	365D0291*	1 Each

Fixed needle, gas tight syringes

Volume (µL)	Length (mm)	Gauge	Tip Style	Type	Cat. No.	Quantity
10	85	23s	Cone	Merlin Valve SSL Injector: Splitless	365D0301	1 Each
	57	23s	Cone	SSL, PTV and Merlin Adapter, especially suitable for volatile solvents or corrosive samples	365D0311*	1 Each
	85	26s	Cone	Splitless and OC	365D0321	1 Each
	57	26s	Cone	SSL, PTV and Merlin Adapter, especially suitable for volatile solvents or corrosive samples	365D0331*	1 Each
25	57	23s	Cone	SSL, PTV and Merlin Adapter	365F2441*	1 Each
	85	26s	Cone	Splitless and OC	365F2451	1 Each
	57	26s	Cone	SSL and PTV	365F2461*	1 Each
50	57	23s	Cone	Large Volume Injection, SSL	365G2311*	1 Each
	85	26s	Cone	LV OC	365G2321	1 Each
100	57	23s	Cone	Large Volume Injection, SSL	365H2141*	1 Each
	85	26s	Cone	LV OC	365H2151	1 Each
	57	26s	Cone	Large Volume Injection, SSL w/o Merlin Adapter	365H2161*	1 Each
	85	23	Side Hole	Variable depth LV PTV (w & w/o Merlin)	365H2171	1 Each
	57	23	Side Hole	Large Volume Injection, PTV	365H2181*	1 Each
250	85	26	Cone	LV OC	365I2321	1 Each
	57	26	Cone	LV Splitless	365I2331	1 Each
	85	23	Side Hole	Variable depth LV PTV (w & w/o Merlin)	365I2341	1 Each
	57	23	Side Hole	LV PTV (with or without Merlin valve)	365I2351	1 Each
500	85	26	Cone	LV OC	365J2411	1 Each
	57	26	Cone	Sample Preparation, i.e. dilution, derivatization	365J2421	1 Each
	57	23	Side Hole	LV PTV (with or without Merlin valve)	365J2441	1 Each
	65	23	Side Hole	Headspace, up to 115 deg.	365Q2121	1 Each
	57	22	LC	Sample Preparation, i.e. dilution, derivatization	365K2811	1 Each
2500	65	23	Side Hole	Headspace, up to 115 deg.	365Q2131	1 Each
	65	23	Side Hole	Headspace, up to 150 deg.	365L2321	1 Each
5000	65	22	Side Hole	Headspace up to 115 deg.	365Q2141	1 Each
10000	57	19	LC	Sample Preparation, i.e. dilution, derivatization	365N2721	1 Each

* Also suitable for use with the Thermo Scientific™ TriPlus™ 100LS Autosampler

GC syringes for Thermo Scientific instruments

Removable needle, gas tight syringes

Volume (μL)	Length (mm)	Gauge	Tip Style	Type	Cat No.	Quantity	Replacement Needle Cat. No.	Quantity	Instrument Compatibility
10	75	31	Cone	Manual OC	36500520	1 Each	36550046	2 Pack	
100	50	23	Side hole	See Note	36520050	1 Each	36550040	2 Pack	TriPlus, AS200/AS800
100	50	23	Cone	LV Splitless	36500495	1 Each	36566485	5 Pack	TriPlus, AS2000, AS200/AS800
250	80	26	Cone	LVOC	36500490	1 Each	36566480	5 Pack	TriPlus, AS2000
250	50	23	Side hole	See Note	36520051	1 Each	36550040	2 Pack	TriPlus, AS2000, AS200/AS800
1000	50	23	Bevel		365K3041	1 Each	365RN235	5 Pack	AS200/AS800

Removable needle syringes

Volume (μL)	Length (mm)	Gauge	Tip Style	Type	Cat No.	Quantity	Replacement Needle Cat. No.	Quantity	Instrument Compatibility
5	75	31	Cone	Manual OC	36500510	1 Each	36550045	2 Pack	
10	50	26	Cone		365D1841	1 Each	365RN362	2 Pack	AS3000, AS2000
10	50	23	Cone		365D3731	1 Each	365RN372	2 Pack	AS3000, AS2000, AS200/AS800
50	50	23	Cone	LV Splitless	36503015	1 Each	36566485	5 Pack	AS2000

Syringe 36520051 is to be used when performing PTV/LVI injections with a dedicated liner for thermal labile compounds (liner 45352060). Compatible with Merlin Microseal device installed on BEST PTV and with AS2000 and TriPlus autosamplers for liquids.

Fixed needle, gas tight syringes

Volume (μL)	Length (mm)	Gauge	Tip Style	Type	Cat No.	Quantity	Instrument Compatibility
10	50	23	Cone		365D3741	1 Each	AS2000
100	50	25	Bevel		365H2321	1 Each	AS200/AS800
250	50	25	Bevel		365I2561	1 Each	AS200/AS800

Fixed needle syringes

Volume (μL)	Length (mm)	Gauge	Tip Style	Type	Cat No.	Quantity	Instrument Compatibility
5	50	26	Cone	Split/PTV	36504047	1 Each	TriPlus
5	50	23	Cone		365C3701	1 Each	AS3000, AS2000, AS200/AS800 AI/AS1310
5	50	26	Cone	Split/PTV	36500505	1 Each	AS3000, AS2000 AI/AS1310
5	80	26	Cone	Splitless and OC	36502025	1 Each	TriPlus
10	50	26	Cone		365D3711	1 Each	AS3000, AS200, AS200/AS800
10	50	26	Cone		365D1856	6 Pack	AS300, AS2000, AS200/AS800
10	50	25	Cone	Split/PTV	36500525	1 Each	TriPlus, AS3000, AS2000, AS200/AS800, AI/AS1310

Fixed needle syringes (Continued)

Volume (µL)	Length (mm)	Gauge	Tip Style	Type	Cat No.	Quantity	Instrument Compatibility
10	50	23	Cone	PTV/SSL Split	36520060	1 Each	AI/AS1310, TriPlus, AS300, AS2000, AS200/AS800
10	80	23	Cone	Merlin Valve SSL Splitless	36520061	1 Each	TriPlus, AS2000
10	50	23-26	Cone	OC in PTV Merlin Valve	36500580	1 Each	TriPlus, AS2000
10	80	26	Cone	OC and Splitless	36502019	1 Each	TriPlus, AS2000

Plunger-in-needle syringes

Volume (µL)	Length (mm)	Gauge	Tip Style	Type	Cat No.	Quantity	Instrument Compatibility
0.5	50	23	Cone	Split/PTV	36504045	1 Each	AI/AS1310, TriPlus, AS3000
0.5	75	31	Cone	Manual OC	36500500	1 Each	
0.5	80	26	Cone	Splitless and OC	36504046	1 Each	TriPlus

GC syringes for Agilent instruments

Removable needle syringes

Volume (µL)	Length (mm)	Gauge	Tip Style	Cat. No.	Quantity
10	42	23	Cone	365D1611	6 Pack

Fixed needle, gas tight syringes

Volume (µL)	Length (mm)	Gauge	Tip Style	Cat. No.	Quantity
10	42	23-26	Cone	365D0621	1 Each
		23-26	Cone	365D0626	6 Pack

Fixed needle syringes

Volume (µL)	Length (mm)	Gauge	Tip Style	Cat. No.	Quantity
5	42	23	Cone	365C0951	1 Each
		23	Cone	365C0956	6 pack
		23-26s	Cone	365C0971	1 Each
		23-26s	Cone	365C0976	6 pack
10	42	23	Cone	365D1571	1 Each
		23	Cone	365D1576	6 pack
		23-26s	Cone	365D1621	1 Each
		23-26s	Cone	365D1636	6 pack

Fixed needle, super-elastic plunger syringes

Volume (µL)	Length (mm)	Gauge	Tip Style	Cat. No.	Quantity
10	42	23-26s	Cone	365D5416	1 Each

GC syringes for Shimadzu instruments

Removable needle syringes

Volume (μL)	Length (mm)	Gauge	Tip Style	Cat. No.	Quantity	Replacement Needle Cat. No.	Quantity
5	42	26s	Cone	365C6610	1 Each		
		23s	Cone			365RN661	2 Pack
	42	26s	Cone	365D6610	1 Each	365RN272	2 Pack
		23s	Cone	365D6620	1 Each		

GC syringes for CTC instruments

Removable needle syringes

Volume (μL)	Length (mm)	Gauge	Tip Style	Cat. No.	Quantity	Replacement Needle Cat. No.	Quantity
10	50	23	Cone	365D3731	1 Each	365RN372	2 Pack
		26	Cone	365D1841	1 Each	365RN362	2 Pack

Fixed needle, gas tight syringes

Volume (μL)	Length (mm)	Gauge	Tip Style	Cat. No.	Quantity
10	50	23	Cone	365D2976	6 Pack
		26	Cone	365D2977	1 Each
		23	Cone	365D3741	1 Each
25	50	23	Cone	365F3761	1 Each
100	50	23	Cone	365H3771	1 Each
250	50	26	Cone	365H6700	1 Each
1000	50	26	Side Hole	365K8135	1 Each
2500	50	26	Side Hole	365L8635	1 Each

Fixed needle syringes

Volume (μL)	Length (mm)	Gauge	Tip Style	Cat. No.	Quantity
5	50	23	Cone	365C3701	1 Each
		26	Cone	36500505	1 Each
10	50	26	Cone	365D3711	1 Each
		23	Cone	36520060	1 Each
		26	Cone	365D1856	6 Pack
		23	Cone	365D2971	6 Pack

Learn more at thermofisher.com/GCparts

Manual GC syringes

Removable needle, gas tight syringes

Volume a(μL)	Length (mm)	Gauge	Tip Style	Cat. No.	Quantity	Replacement Needle Cat. No.	Quantity
10	50	26s	Bevel	365D0811	1 Each	365RN215	5 Pack
25	50	25	Bevel	365F1931	1 Each	365RN225	5 Pack
		22s	Blunt End	365FLG31	1 Each	365RNL25	5 Pack
50	50	22s	Blunt End	365GLG41	1 Each	365RNL25	5 Pack
500	50	25	Bevel	365J2881	1 Each	365RN225	5 Pack
		22s	Blunt End	365JLG71	1 Each	365RNL25	5 Pack
1000	50	23	Bevel	365K3041	1 Each	365RN235	5 Pack
		22s	Blunt End	365KLG81	1 Each	–	
		22	Bevel	365M5212	1 Each	–	
5000	50	22s	Blunt End	365M6322	1 Each	–	
		22s	Side Hole	365M8922	1 Each	–	
10000	50	22	Bevel	365N5214	1 Each		
		22s	Side Hole	365N8923	1 Each	365RN465	2 Pack

Removable needle syringes

Volume (μL)	Length (mm)	Gauge	Tip Style	Cat. No.	Quantity	Replacement Needle Cat. No	Quantity
10	50	26	Bevel	365D1171	1 Each	365RN215	5 Pack
25	50	25	Bevel	365F1901	1 Each	365RN225	5 Pack
50	50	25	Bevel	365G2091	1 Each	365RN225	5 Pack

Fixed needle, gas tight syringes

Volume (μL)	Length (mm)	Gauge	Tip Style	Cat. No.	Quantity
10	50	26	Bevel	365D4433	1 Each
		26s	Blunt End	365D6314	1 Each
25	50	22s	Blunt End	365F6315	1 Each
50	50	25	Bevel	365G2111	1 Each
		22s	Blunt End	365G6316	1 Each
100	50	25	Bevel	365H2321	1 Each
		22s	Blunt End	365H6317	1 Each
250	50	25	Bevel	365I2561	1 Each
500	50	25	Bevel	365J2831	1 Each
		22s	Blunt End	365J6319	1 Each
1000	50	22	Bevel	365K3051	1 Each

Fixed needle syringes

Volume (μL)	Length (mm)	Gauge	Tip Style	Cat. No.	Quantity
5	50	26	Bevel	365C0741	1 Each
10	50	26	Bevel	365D1091	1 Each
		26	Bevel	365D1096	6 Pack
25	50	25	Bevel	365F1891	1 Each
100	50	25	Bevel	365H2291	1 Each

PTFE Luer-Lok, gas tight syringes

<i>Volume (μL)</i>	<i>Cat. No.</i>	<i>Quantity</i>	<i>Needle Cat. No.</i>	<i>Quantity</i>
25	365F7655	1 Each	365RNL22	2 Pack
50	365G7656	1 Each	365RNL22	2 Pack
100	365H7657	1 Each	365RNL22	2 Pack
250	365I7658	1 Each	365RNL22	2 Pack
500	365J7659	1 Each	365RNL22	2 Pack
1000	365KL531	1 Each	365RNL22	2 Pack
2500	365LL541	1 Each	365RNL22	2 Pack
5000	365ML551	1 Each	365RNL22	2 Pack
10000	365NL561	1 Each	365RNL22	2 Pack
25000	365PL571	1 Each	365RNL22	2 Pack

Please note that the Luer-Lok syringes do not come with a needle and therefore the needle part number needs to be ordered separately

Luer tip, gas tight syringes

Volume (μL)	Cat. No.	Quantity
100	365H7814	1 Each
1000	365K7817	1 Each
2500	365L7818	1 Each
5000	365M7819	1 Each
10000	365N7820	1 Each



Injection port septa

Quality materials for all applications

BTO septa

- Low bleed septa - ideal for MS applications
- Excellent mechanical properties
- Maximum temperature 400°C

TR-Green septa

- Long injection lifetime
- Low injection port adhesion
- Maximum temperature 350°C

Marathon septa

- Pre-pierced for reliable performance
- Up to 400 injections per septa
- Maximum temperature 350°C

TR-Blue septa

- General purpose septa
- Easy to penetrate
- Maximum temperature 200-250°C

Septa

Material	ID (mm)	Cat. No. (Blister Pack)	Quantity (Blister Pack)	Cat. No. (Glass Jar)	Quantity (Glass Jar)
BTO	9	31303240-BP	50 Pack	31303240	50 Pack
BTO	11	31303233-BP	50 Pack	31303233	50 Pack
BTO	11.5	31303230-BP	50 Pack	31303230	50 Pack
BTO	12.7	31303250-BP	48 Pack	31303228	50 Pack
BTO	17	31303215-BP	48 Pack	31303211	50 Pack
TR-Green	9	313G3240-BP	50 Pack	313G3240	50 Pack
TR-Green	11	313G3230-BP	50 Pack	313G3230	50 Pack
TR-Green	12.7	—	48 Pack	313G3228	50 Pack
TR-Green	17	313G3215-BP	48 Pack	313G3211	50 Pack
Marathon	9	313P3240-BP	50 Pack	313P3240	50 Pack
Marathon	11	313P3233-BP	50 Pack	313P3233	50 Pack
Marathon	11.5	313P3230-BP	50 Pack	313P3230	50 Pack
Marathon	17	313P3215-BP	48 Pack	313P3211	50 Pack
TR-Blue	9	N/A	N/A	313B3240	50 Pack
TR-Blue	11	N/A	N/A	313B3233	50 Pack
TR-Blue	11.5	N/A	N/A	313B3230	50 Pack
TR-Blue	17	N/A	N/A	313B3211	50 Pack

Learn more at thermofisher.com/GCparts



Gold and siltek inlet base seals

- Precision machined to provide exceptional sealing properties
- Gold plating and Siltek coatings provide a surface with exceptional inertness for analysis of highly active compounds
- High grade stainless steel providing reproducible seal
- Compatible with Thermo Scientific TRACE 1300 Series GC & Agilent split/splitless injection ports

Gold inlet base seals

For Use With	ID (mm)	Cat. No.	Quantity
Single Column Installation	0.8	290GA081	10 Pack
Single Column Installation	0.8	290GA082	2 Pack
Single Column Installation (Cross Version)	0.8	290GA084	10 Pack
Single Column Installation (Cross Version)	0.8	290GA083	2 Pack
Dual Column Installation	1.2	290GA121	10 Pack
Dual Column Installation	1.2	290GA122	2 Pack

Siltek inlet base seals

For Use With	ID (mm)	Cat. No.	Quantity
Single Column Installation	0.8	290GA091	10 Pack
Single Column Installation	0.8	290GA092	2 Pack
Single Column Installation (Cross Version)	0.8	290GA094	10 Pack
Single Column Installation (Cross Version)	0.8	290GA093	2 Pack



Injection port liners

LinerGOLD GC liners

The GOLD standard in GC liner performance

- **Increased accuracy and sensitivity in analysis** – LinerGOLD prevents the loss of sensitive compounds in analysis
- **Lower detection limits** – when analyzing active and sensitive compounds
- **Excellent reproducibility** – gives confidence in your results from liner to liner – setting the GOLD standard

The GOLD standard in liner consistency

Consistency in your GC liner is of paramount importance – you expect to see a consistently high level of performance time after time. Thermo Scientific™ LinerGOLD™ GC liners are manufactured and tested to ensure that you have confidence with every liner that it installed onto your GC system.

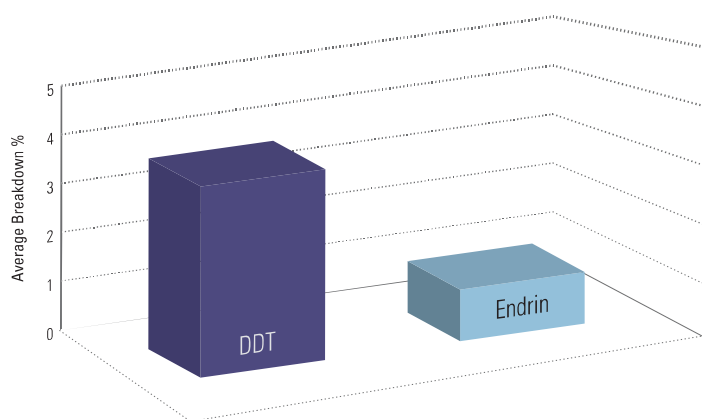


Figure 1: Endrin and DDT breakdown test results showing the lot-to-lot reproducibility and low levels of inertness of LinerGOLD

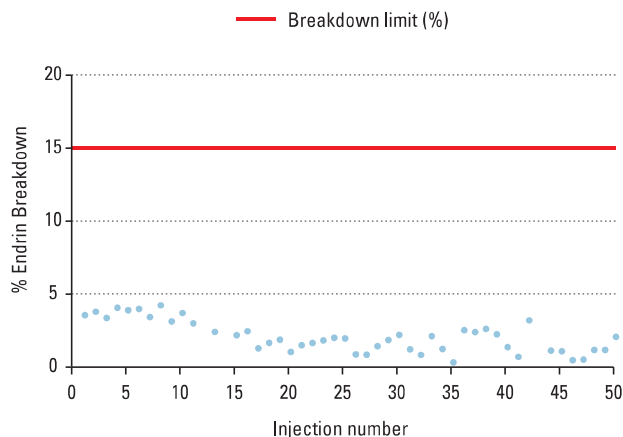
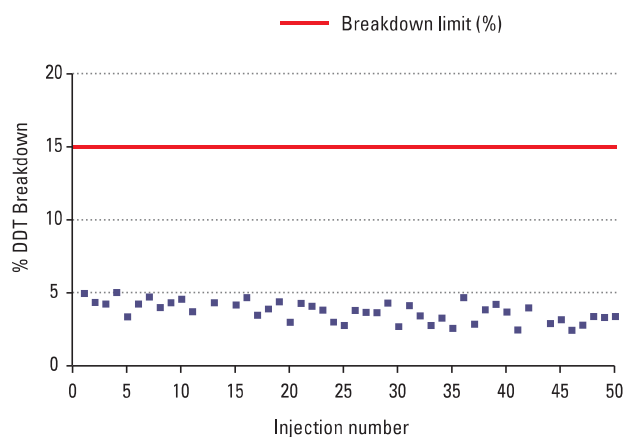
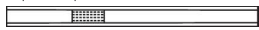
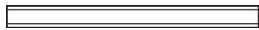
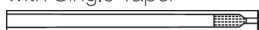
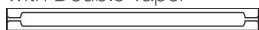
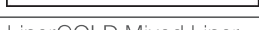


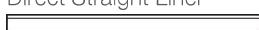
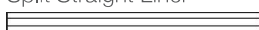
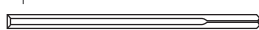
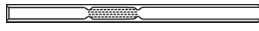
Figure 2: Compound degradation after 50 injections – LinerGOLD exhibits minimal breakdown

Learn more at thermofisher.com/GCparts

**LinerGOLD GC liners for Thermo Scientific TRACE 1300 series
and Agilent instruments, SSL injector**

Injection Type	ID x OD (mm)	Length (mm)	Packing	Cat. No. 5 Pack	Cat. No. 25 Pack
Split/Splitless Liner 	4 x 6.3	78.5	Quartz Wool	453A2265-UI	453A1262-UI
Split/Splitless Straight Liner 	4 x 6.3	78.5	No	453A1295-UI	453A2292-UI
Splitless/Split Liner with Single Taper 	4 x 6.3	78.5	No	453A1345-UI	453A2342-UI
Splitless/Split Liner with Single Taper 	4 x 6.3	78.5	Quartz Wool	453A1925-UI	453A2922-UI
Splitless Liner with Double Taper 	4 x 6.3	78.5	No	453A1355-UI	453A2352-UI
Precision Split/Splitless Liner 	4 x 6.3	78.5	Quartz Wool	453A1255-UI	453A1252-UI
Direct Straight Liner 	1 x 6.3	78.5	No	453A1335-UI	453A2332-UI
LinerGOLD Mixed Liner Pack	1 x 6.3	Mixed	Mixed	453TH002-UI	N/A

LinerGOLD GC liners for Thermo Scientific TRACE Ultra and FOCUS instruments

Injection Type	ID x OD (mm)	Length (mm)	Packing	Cat. No. 5 Pack	Cat. No. 25 Pack
Direct Straight Liner 	5 x 8	105	No	45350030-UI	45354030-UI
Split Straight Liner 	3 x 8	105	No	45350031-UI	45354031-UI
Splitless Liner 	3 x 8	105	No	45350032-UI	45354032-UI
Splitless Liner 	5 x 8	105	No	45350033-UI	45354033-UI
Precision Liner 	5 x 8	105	Quartz Wool	453T1905-UI	453T4905-UI
Splitless Precision Liner 	5 x 8	105	Quartz Wool	453T2999-UI	453T4999-UI
Baffled PTV Liner	2 x 2.75	120	No	453T2845-UI	453T4845-UI



Injection port liners for Thermo Scientific instruments

Highly deactivated and produced to exacting tolerances to ensure a high degree of reproducibility

Liners for Thermo Scientific TRACE 1300 series SSL instruments and Agilent instruments, SSL injector

	Injection Type	ID x OD (mm)	Length (mm)	Packing	Cat. No. 5 Pack	Cat No. 25 Pack
	Direct Straight Liner	1.2 x 6.3	78.5	No	453A1335	453A2332
	Split Straight Liner	4 x 6.3	78.5	Quartz Wool	453A2265	453A1262
	Split Straight Liner	4 x 6.3	78.5	No	453A1295	453A2292
	Split/Splitless FocusLiner	4 x 6.3	78.5	Quartz Wool	453A1255	453A1252
	Split/Splitless FocusLiner with Single Taper	4 x 6.3	78.5	Quartz Wool	453A1315	453A1312
	Split/Splitless Liner with Single Taper	4 x 6.3	78.5	No	453A1345	453A2342
	Split/Splitless Liner with Double Taper	4 x 6.3	78.5	No	453A1355	453A2352
	Split/Splitless Liner w/ Recessed Gooseneck	4 x 6.3	78.5	Quartz Wool	453A1305	N/A
	Splitless Liner with Single Taper	4 x 6.3	78.5	Quartz Wool	453A1925	N/A
	Split/Splitless Mini-Lam Liner	4 x 6.3	78.5	No	453A2009	N/A
	Split/Splitless Mixed Liner Sample Pack	Mixed	Mixed	Mixed	453TH002	N/A

Liners for Thermo Scientific TRACE 1300 series and TRACE ULTRA PTV instruments, PTV injector

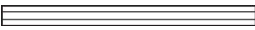
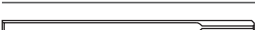
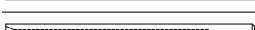
	Injection Type	ID x OD (mm)	Length (mm)	Packing	Cat. No. 2 Pack	Cat. No. 5 Pack	Cat. No. 25 Pack
	PTV Straight Liner	1 x 2.75	120	No	N/A	45352054	N/A
	PTV Straight Liner	2 x 2.75	120	No	N/A	45352057	45354057
	PTV Straight Liner (deactivated)	2 x 2.75	120	No	45322045	N/A	N/A
	PTV Liner with Sintered Lining	1 x 2.75	120	No	N/A	45352060	N/A
	PTV Liner with Three Baffles	1 x 2.75	120	No	N/A	45352062	N/A
	PTV Siltek Metal Liner	1 x 2.75	120	No	45322046	N/A	N/A
	PTV Siltek Metal Liner	2 x 2.75	120	No	45322044	N/A	N/A
	PTV Siltek Metal Liner	2 x 2.75	120	Wool	45322056	N/A	N/A
	PTV Baffle Liner (Siltek)	2 x 2.75	120	No	N/A	453T2120	N/A
	PTV Split Liner with Recessed Gooseneck	2 x 2.75	120	Quartz Wool	N/A	45352070	N/A
	PTV Silcosteel Liner for OC	1 x 2.75	120	No	45322052	N/A	N/A

Learn more at thermofisher.com/GCparts

Liner sealing rings for Thermo Scientific instruments

Description	Cat. No.	Quantity
Liner Sealing Ring for TRACE 1300 Series GC SSL Injector	29001320	5 Each
Liner Sealing Ring for TRACE 1300 Series GC PTV Injector	29001318	1 Each
Liner sealing Ring for TRACE and FOCUS GC SSL Injector	29033406	10 Pack
Liner sealing Ring for TRACE PTV Injector	29013417	2 Pack

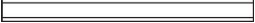
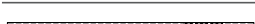
Liners for Thermo Scientific TRACE ULTRA and FOCUS SSL instruments, SSL injector

	Injection Type	ID x OD (mm)	Length (mm)	Packing	Cat. No. 5 Pack	Cat No. 25 Pack
	Split Straight Liner	5 x 8	105	No	45350030	45354030
	Split Straight Liner	3 x 8	105	No	45350031	45354031
	Split Straight Liner	5 x 8	105	CarboFrit	453T2131	N/A
	Splitless Straight Liner	3 x 8	105	No	45350032	45354032
	Splitless Straight Liner	5 x 8	105	No	45350033	45354033
	Splitless Straight Liner	5 x 8	105	CarboFrit	453T2130	N/A
	Splitless Straight Liner (Siltek)	3 x 8	105	No	453T2121	N/A
	Split FocusLiner for 50mm Needle	5 x 8	105	Quartz Wool	453T1905	453T4905
	Splitless FocusLiner for 50mm Needle	5 x 8	105	Quartz Wool	453T2999	453T4999
	Splitless FocusLiner for 70mm Needle	5 x 8	105	Quartz Wool	453T2895	453T4895
	Split/Splitless Straight Liner	0.75 x 2.75	105	No	45352083	N/A



Injection port liners for Agilent instruments

Liners for Agilent instruments

	Injection Type	ID x OD (mm)	Length (mm)	Packing	Cat. No. 5 Pack	Cat No. 25 Pack
	Direct Straight Liner	1.2 x 6.3	78.5	No	453A1335	453A2332
	Split Straight Liner	4 x 6.3	78.5	Quartz Wool	453A2265	453A1262
	Split Straight Liner	4 x 6.3	78.5	No	453A1295	453A2292
	Split/Splitless FocusLiner	4 x 6.3	78.5	Quartz Wool	453A1255	453A1252
	Split/Splitless FocusLiner with Single Taper	4 x 6.3	78.5	Quartz Wool	453A1315	453A1312
	Split/Splitless Liner with Single Taper	4 x 6.3	78.5	No	453A1345	453A2342
	Split/Splitless Liner with Double Taper	4 x 6.3	78.5	No	453A1355	453A2352
	Split/Splitless Liner w/ Recessed Gooseneck	4 x 6.3	78.5	Quartz Wool	453A1305	N/A
	Split/Splitless FAST FocusLiner	2.3 x 6.3	78.5	Quartz Wool	453A1285	453A2282
	Split/Splitless FAST FocusLiner with Single Taper	2.3 x 6.3	78.5	Quartz Wool	453A2375	453A1372
	Splitless Liner with Single Taper	4 x 6.3	78.5	Quartz Wool	453A1925	N/A
	Splitless Straight Liner	2.0 x 6.3	78.5	No	453A2275	N/A
	Splitless Liner with Recessed Gooseneck	2.0 x 6.3	78.5	No	453A2325	N/A
	Single Gooseneck (Deactivated Metal)	5.2 x 6.3	78.5	No	453A2001	N/A
	Cyclosplitter Liner (Deactivated Metal)	5.2 x 6.3	78.5	No	453A2002	N/A
	Split/Splitless Liner with Wool (Deactivated Metal)	5.2 x 6.3	78.5	No	453A2003	N/A
	Split/Splitless Mixed Liner Sample Pack	Mixed	Mixed	No	453AG001	N/A

Liner sealing rings for Agilent instrument

Description	Cat. No.	Quantity
Graphite Liner Sealing Ring for Agilent Direct Straight Liners	290GA242	10 Pack
Graphite Liner Sealing Ring for Agilent SSL Liners	290GA243	10 Pack
Graphite Liner Sealing Ring for Agilent 2.0mm Liners	290GA244	10 Pack
Viton Liner Sealing Ring for Agilent SSL Injector	290OA241	10 Pack

Thermo Scientific GC consumables are suitable for use with Agilent GC systems

Learn more at thermofisher.com/GCparts



Ferrules

Wide range of choices for a wide range of instruments and applications

Thermo Scientific ferrules are available in three different materials and various dimensions to match the instrument and capillary column ID. The choice of material is dependent upon the use; guidelines are given in the table.

Material Type	Suitable for GC-MS	Temp Limit (°C)	Re-usable
Graphite	No	450	Yes
Graphite/Vespel	Yes	350	No
Stainless Steel (SiLTite)	Yes	500	No



100% Graphite Ferrules

Thermo Scientific 100% graphite ferrules are a soft material that is

porous to oxygen, making them suitable for most applications except GC-MS interface connections. These easy-to-use ferrules form a soft grip with the column and provide a stable seal.



15% Graphite / 85% Vespel Ferrules

The mechanically robust 15% Graphite/

85% Vespel ferrules have a long lifetime and are compatible with GC-MS. These ferrules form a strong grip with the column and cannot be reused as they form a permanent seal with the column. They have a temperature limit of 350°C, but must be re-tightened after initial temperature cycles.



SiLTite Metal Ferrules

The SiLTite ferrule forms a strong, permanent, airtight seal

around the capillary column, eliminating leaks. The base of the ferrule is flat and forms a perfect seal with the MS interface. The ferrule's temperature tolerance is well above the limit of the injector, MS interface or GC oven. Unlike other ferrules, SiLTite Ferrules do not need re-tightening after installation.

Please also see syringes on page 5-008.

All varieties of ferrules are supplied in contaminant-free, individual blister packs, allowing removal of an individual item without risk of contamination to the other supplied items.

To select the most appropriate ferrule for your GC system, refer to the table below:

	100% Graphite	15% Graphite/ 85% Vespel	SiLTite
Suitable for Thermo Scientific TRACE ULTRA SSL Injector	•	•	
Suitable for Thermo Scientific TRACE 1300/1310 & Agilent SSL Injectors	•	•	•
Suitable for Thermo Scientific TRACE ULTRA non-MS detectors	•	•	
Suitable for Thermo Scientific TRACE 1300/1310 & Agilent non-MS detectors	•	•	
Suitable for all Thermo Scientific & Agilent MS Detectors		•	•
Suitable for Thermo Scientific PTV Injector	•	•	

Ferrules for Thermo Scientific instruments

For Use with	Material Type	Ferrule Size (Column ID) (mm)	Cat. No.	Quantity
Thermo Scientific TRACE 1300/1310 SSL injectors and non-MS detectors	100 % Graphite	0.1-0.32	290GA139	10 Pack
		0.45-0.53	290GA140	10 Pack
	15% Graphite/85% Vespel	0.1-0.25	290VA191	10 Pack
		0.32	290VA192	10 Pack
		0.53	290VA193	10 Pack
Capillary Column Nut for injectors and non-MS Detectors	Stainless Steel		35050458	5 Pack
Thermo Scientific TRACE Ultra SSL injectors and non-MS detectors	100 % Graphite	0.1-0.25	29053488	10 Pack
		0.32	29053487	10 Pack
		0.53	29053486	10 Pack
	15% Graphite/85% Vespel	0.1-0.25	29033461	10 Pack
		0.32	29033460	10 Pack
		0.53	29033471	10 Pack
		Packed Column 1/8" OD	290VT168	10 Pack
		Packed Column 1/4" OD	290VT165	10 Pack
	15% Graphite/85% Vespel (3.4mm length)	0.1-0.25	290VT186	10 Pack*
		0.32	290VT187	10 Pack*
		0.53	290VT188	10 Pack*
Capillary Column Nut for Graphite/Vespel Ferrules	Brass		290BT239	2 Pack
All Thermo Scientific PTV injectors	100 % Graphite	0.1-0.25	29053488	10 Pack
		0.32	29053487	10 Pack
		0.53	29053486	10 Pack
Thermo Scientific MS detectors	15% Graphite/85% Vespel	0.1-0.25	29033496	10 Pack
		0.32	29033497	10 Pack
Capillary Column Nut for MS Detector	Brass		290BT240	5 Pack
	Stainless Steel		290BT241	5 Pack
Thermo Scientific MS detectors	VESPEL SCP-5000	0.1-0.25	290VT221	5 Pack
Capillary Column Spring Loaded Nut for MS Detectors	Stainless Steel for ISQ/TSQ		1R120434-0010	1 Pack
	Stainless Steel for QE GC/Exactive GC		1R120434-0020	1 Pack
SiITite Kit for Thermo Scientific TRACE 1300/1310 GC SSL injectors	SiITite Metal	0.1-0.25	290MA215	1 Each**
		0.32	290MA216	1 Each**
		0.53	290MA217	1 Each**
SiITite Kit for Thermo Scientific ISQ GC-MS interface	SiITite Metal	0.1-0.25	290MA194	1 Each**
		0.32	290MA195	1 Each**
		0.53	290MA196	1 Each**
Replacement SiITite Ferrules for Thermo Scientific TRACE 1300/1310 SSL and ISQ GC-MS interface kits	SiITite Metal	0.1-0.25	290MA201	10 Pack
		0.32	290MA202	10 Pack
		0.53	290MA203	10 Pack
SiITite Nuts for MS interface			290MA205	5 Pack
SiITite Nuts for SSL injectors			290MA207	5 Pack
SiITite Kits for Thermo Scientific DSQ GC-MS interface	SiITite Metal	0.1-0.25	290MT229	1 Each**
		0.32	290MT230	1 Each**
		0.53	290MT231	1 Each**
		Replacement SiITite Nuts	290MT211	5 Pack
Replacement SiITite Ferrules for Thermo Scientific DSQ GC-MS interface kits	SiITite Metal	0.1-0.25	290MT221	10 Pack
		0.32	290MT222	10 Pack
		0.53	290MT223	10 Pack

* Vespel Ferrules must be used in conjunction with brass nut part number 290BT239

** SiITite Kits contain 2 SiITite nuts and 10 ferrules

Ferrules for Agilent instruments

For Use with	Material Type	Ferrule Size (Column ID) (mm)	Cat. No.	Quantity
Agilent injectors and non-MS detectors	100 % Graphite	0.1-0.32	290GA139	10 Pack
		0.45-0.53	290GA140	10 Pack
		Packed Column 1/8" OD	290GA108	10 Pack
		Packed Column 1/4" OD	290GA107	10 Pack
	15% Graphite/85% Vespel	0.1-0.25	290VA191	10 Pack
		0.32	290VA192	10 Pack
		0.53	290VA193	10 Pack
		Packed Column 1/8" OD	290VT168	10 Pack
		Packed Column 1/4" OD	290VT165	10 Pack
Capillary Column Nut for injectors and non-MS Detectors	Stainless Steel		35050458	5 Pack
Agilent MS detectors	15% Graphite/85% Vespel	0.1-0.25	29033496	10 Pack
		0.32	29033497	10 Pack
		0.53	290VP144	10 Pack
SiITite Kits for Agilent SSL injectors	SiITite Metal	0.1-0.25	290MA215	1 Each*
		0.32	290MA216	1 Each*
		0.53	290MA217	1 Each*
SiITite Nuts for MS interface			290MA205	5 Pack
SiITite Kit for Agilent MS detectors	SiITite Metal	0.1-0.25	290MA194	1 Each**
		0.32	290MA195	1 Each**
		0.53	290MA196	1 Each**
Replacement SiITite Ferrules for all SiITite Kits	SiITite Metal	0.1-0.25	290MA201	10 Pack
		0.32	290MA202	10 Pack
		0.53	290MA203	10 Pack
SiITite Nuts for SSL injectors			290MA207	5 Pack
Replacement Baseplate Seals			290MA227	2 Pack
			290MA228	10 Pack

Thermo Scientific GC consumables are suitable for use with Agilent GC systems

* Kit contains 2 nuts, 10 ferrules and 2 base seals

** Kit contains 2 nuts and 10 ferrules



Capillary accessories

SilTite μ -Union

The tiny connection for GC Columns

The SilTite μ -Union is a connector for GC capillary columns, giving zero dead volume. The product has low thermal mass – it is only 9mm in length and has a mass <0.5g. It is available in kits to connect columns from 0.1mm ID to 0.53mm ID.

- Zero dead volume – giving optimized peak shapes
- FingerTite technology – easy to install and leak-free
- Highly inert and robust

Each SilTite μ -Union kit contains the following:

- 5 x ferrules
- 2 x union fittings
- Installation jigs
- Installation instructions



SilTite μ -Union kits, ferrules and replacement unions

Column ID (mm)	2nd Column ID (mm)	SilTite μ -Union Kit Cat. No. (1 Each)	SilTite μ -Union Ferrules Cat. No. (10 Pack)	SilTite μ -Union Replacement Union Cat. No. (1 Each)
0.1 – 0.25	0.1-0.25	290SM301	290SM401	290SM321
	0.32	290SM302	290SM402	290SM321
	0.53	290SM303	290SM403	290SM322
0.32	0.32	290SM304	290SM404	290SM321
	0.53	290SM305	290SM405	290SM322

SilTite capillary column connectors

For use with capillary GC columns

- For fused silica capillary columns
- Glass lined for inertness
- Low thermal mass
- Each pack contains 1 Connector, 2 Nuts and 5 Ferrules

SilTite capillary column connectors and ferrules

Column ID (mm)	2nd Column ID (mm)	SilTite Column Connector Kit Cat. No. (1 Each)	SilTite Ferrules Cat. No. (10 Pack)	Replacement SilTite Connector Nuts* Cat. No. (5 Pack)
0.1-0.25	0.1-0.25	290MU498	290MF229	290MN211
0.32	0.32-0.53	290MU499	290MF230	290MN211
0.53	0.45-0.53	290MU500	290MF231	290MN211

* SilTite nuts must be used with SilTite ferrules

GC capillary connectors

Description	Cat. No.	Quantity
Universal Capillary Connector	64000-001	1 Each
Y Capillary Connector	64000-002	1 Each

Finger tite connectors

Easier fit, reliability and leak-free connections

- No need to re-tighten ferrules as they expand and contract with the fitting
- Easy to handle with the nut touchable even with a hot injector/detector
- No tools required



Finger tite connectors for TRACE 1300 series GC and Agilent GCs

Description	Cat. No.	Quantity
Split/Splitless and MS Starter Kit	290SA131	1 Each
Split/Splitless and FID Starter Kit	290SA132	1 Each
Split/Splitless Injector Base Seal	290SA133	2 Pack
Ferrules for 0.1-0.25mm ID Columns	290S1132	10 Pack
Ferrules for 0.32mm ID Columns	290S1131	10 Pack

Finger tite connectors for TRACE GC Ultra and FOCUS GCs

Description	Cat. No.	Quantity
Female Nut	290ST130	5 Pack
Split/Splitless and MS Starter Kit	290ST131	1 Each
Split/Splitless and FID Starter Kit	290ST132	1 Each
Ferrules for 0.1-0.25mm ID Columns	290S1132	10 Pack
Ferrules for 0.32mm ID Columns	290S1131	10 Pack

Retention gap kits

Support Thermo Scientific gas chromatography consumables

- Kit contains one union and five ferrules
- Length of deactivated fused silica tubing



Retention gap kits

Description	Cat. No.	Quantity	Replacement Union Cat. No.	Quantity
Retention Gap Kit, 0.22 – 0.32mm ID, 2m	260RG497	1 Each	290GU498	1 Each
Retention Gap Kit, 0.53mm ID, 2m	260RG499	1 Each	290GU499	1 Each
Retention Gap Kit, 0.53mm ID, 5m	260RG500	1 Each	290GU499	1 Each

Deactivated silica tubing

Description	Cat. No.	Quantity
Deactivated silica tubing, 0.32mm ID; 2m Length	260G498P	1 Each
Deactivated silica tubing, 0.53mm ID; 2m Length	260G499P	1 Each
Deactivated silica tubing, 0.25mm ID; 5m Length	260G495P	1 Each
Deactivated silica tubing, 0.32mm ID; 5m Length	260G496P	1 Each
Deactivated silica tubing, 0.53mm ID; 5m Length	260G500P	1 Each
Deactivated silica tubing, 0.53mm ID; 1m Length (Siltek)	260G401P	1 Each

Capillary GuardGOLD and HydroGOLD columns

Providing protection to the analytical column

- Protects against column contamination caused by non-volatile materials, extending the column lifetime
- Focuses target analytes at the head of the analytical column, leading to better chromatographic peak shape
- Highly deactivated to provide superior inertness, essential for analysis of active compounds
- HydroGOLD extends column lifetime by preventing degradation from harsh “steam-cleaning” water injections

Capillary Thermo Scientific™ GuardGOLD™ and HydroGOLD columns

ID (mm)	Length (m)	GuardGOLD Cat. No.	Quantity	HydroGOLD Cat. No.	Quantity
0.18	2	26050-0218	1 Each	26H50-0218	1 Each
0.25	2	26050-0225	1 Each	26H50-0225	1 Each
0.32	2	26050-0232	1 Each	26H50-0232	1 Each
0.53	2	26050-0253	1 Each	26H50-0253	1 Each
0.18	5	26050-0518	1 Each	26H50-0518	1 Each
0.25	5	26050-0525	1 Each	26H50-0525	1 Each
0.32	5	26050-0532	1 Each	26H50-0532	1 Each
0.53	5	26050-0553	1 Each	26H50-0553	1 Each
0.18	10	26050-1018	1 Each	26H50-1018	1 Each
0.25	10	26050-1025	1 Each	26H50-1025	1 Each
0.32	10	26050-1032	1 Each	26H50-1032	1 Each
0.53	10	26050-1053	1 Each	26H50-1053	1 Each

Capillary column end caps

Feature a universal fit to all GC capillary columns

- Eliminate column contamination caused by leaving a column unsealed or sealed with a septum
- Color-coordinated fittings ensure that the column is reinstalled the same way it came out
- Reusable



Capillary column end caps

Description	Cat No.	Quantity
Capillary Column End Caps, Paired	260EC111	10 Pack

Learn more at thermofisher.com/GCparts

SWAP-IT GC-MS interface system

Easy to install for quick column changeovers

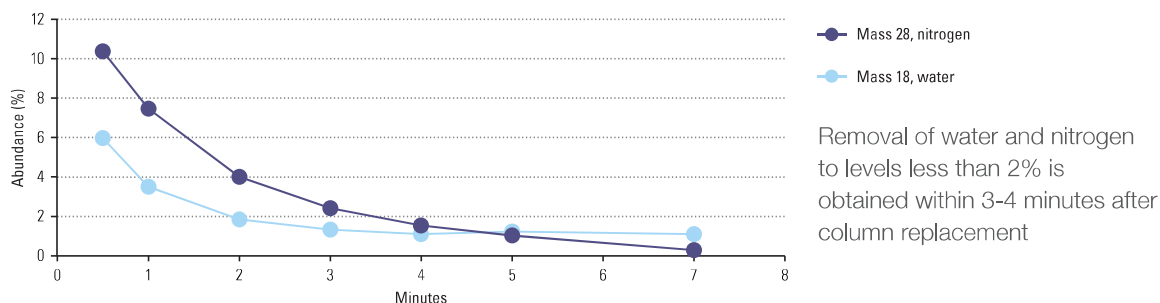
The SWAP-IT GC-MS Interface provides a powerful tool for switching capillary columns without the need to vent the MS

- Specially deactivated, robust stainless steel transfer capillary provides an interface between the analytical column and the MS detector
- Small ID of transfer capillary ensures exposure to air and water is reduced to a minimum during disconnection of the analytical column
- The system works without the requirement for additional He-purge
- Finger-tight connections make exchanging the analytical column quick and easy without the need for tools



SWAP-IT GC-MS Interface system

Description	Cat. No.	Quantity
For Thermo Scientific Instruments (ISQ GC-MS, TSQ 8000 GC-MS/MS)		
SWAP-IT GC-MS Interface Kit: SWAP-IT GC-MS Interface, Nuts, Ferrules, Accessories	60180-791	1 Each
For Thermo Scientific Instruments (DSQ GC-MS, DSQ II GC-MS, PolarisQ GC-MS, ITQ GC-MS only)		
SWAP-IT GC-MS Interface Kit: SWAP-IT GC-MS Interface, Nuts, Ferrules, Accessories	60180-790	1 Each
SWAP-IT GC-MS Interface, SWAP-IT only	60180-792	1 Each
Transfer Line Nut	290SG001	1 Each
Graphite/Vespel Ferrule for Transfer Line	290SG020	10 Pack
For Agilent Instruments		
SWAP-IT GC-MS Interface Kit: SWAP-IT GC-MS Interface, Nuts, Ferrules, Accessories	60180-794	1 Each
SWAP-IT GC-MS Interface, SWAP-IT Only	60180-796	1 Each
Transfer Line Nut	290SG004	1 Each
Graphite/Vespel Ferrule for Transfer Line	290SG021	10 Pack
SWAP-Tight Nut and Adaptor for S/SL Injector	290SG003	1 Each
Accessories		
SWAP-Tight Nut	290SG002	1 Each
SWAP-Tight Ferrules, Blank	290SG000	10 Pack
SWAP-Tight Ferrules, 0.1 – 0.25mm	290SG025	10 Pack
SWAP-Tight Ferrules, 0.32mm	290SG032	10 Pack



3-Port SilFlow device

Switch your GC column without the need to vent

- Allows column switching in GC-MS without the need to vent
- Utilizes a make up gas module and a microfluidic device
- SilTite FingerTite fittings for easy set up and a reliable seal



3-Port SilFlow device

Description	Cat. No.	Quantity
3 Port SilFlow MCD (0.25/0.32)	60201-398	1 Each

3-Port SilFlow replacement parts

Description	Cat. No.	Quantity
SilFlow Fingertight Ferrules for 0.25mm ID Columns	29063466	10 Pack
SilFlow Fingertight Ferrules for 0.32mm ID Columns	29063467	10 Pack
SilFlow Fingertight Tool	60201-401	1 Each
SilFlow Nuts	290SF302	10 Pack
Blanking Ferrule	290ST414	5 Pack
170µm Deactivated Tubing 0.363mm OD 60cm Length	60201-390	1 Each
75µm Untreated Fused Silica Tubing 0.363mm OD 30cm Length	60201-391	1 Each
170µm Deactivated Tubing 0.363mm OD 120cm Length	60201-394	1 Each
75µm Untreated Fused Silica Tubing 0.363mm OD 80cm Length	60201-395	1 Each

GC tubing

GC tubing for plumbing GC systems

GC tubing

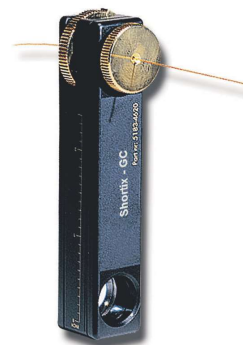
Material	OD (in)	ID (in)	Length (ft)	Cat. No.	Quantity
Copper	1/8	0.065	50	60181-632	1 Each
	1/4	0.19	50	60181-633	1 Each
Stainless Steel	1/16	0.01	25	60181-634	1 Each
		0.02	25	60181-635	1 Each
		0.03	25	60181-636	1 Each
		0.04	25	60181-637	1 Each
	1/8	0.085	25	60181-638	1 Each
	1/4	0.21	25	60181-639	1 Each

GC tools

Support GC applications

GC tools

Description	Cat. No.	Quantity
Straight-Tipped Forceps	60180-770	1 Each
Angle-Tipped Forceps	60180-771	1 Each
0.35mm Drill Bit	60180-779	1 Each
0.45mm Drill Bit	60180-780	1 Each
0.70mm Drill Bit	60180-781	1 Each
Adjustable Spanner	60180-782	1 Each
Shortix Capillary Column Cutter	60180-835	1 Each
Shortix Capillary Column Cutter Repair Kit	60180-836	1 Each
Ceramic Column Cutter	60201-318	1 Each



GC tool kits

Includes: Wrench sets, flashlight, brushes, mini-drill set and other tools for maintaining your GC system performance

GC tool kits

Description	Cat. No.	Quantity
Capillary Tool Kit for Thermo Scientific GCs	60180-784	1 Each
Capillary Tool Kit for Agilent GCs	60180-786	1 Each

GC installation kit

Includes:

- Tubing cutter
- 1/8 x 1/4in. reamer
- 7/16in. wrench
- 1/2in. wrench
- 1/8in. brass tees, 4
- 1/8in. brass nuts, 10
- Brass front and back ferrules, 10
- 15.2m instrument-grade, cleaned 1/8in. copper tubing



GC installation kit

Description	Cat. No.	Quantity
GC Installation Kit	60180-888	1 Each

GLD pro gas leak detector

Aids in quickly locating and identifying gas leaks

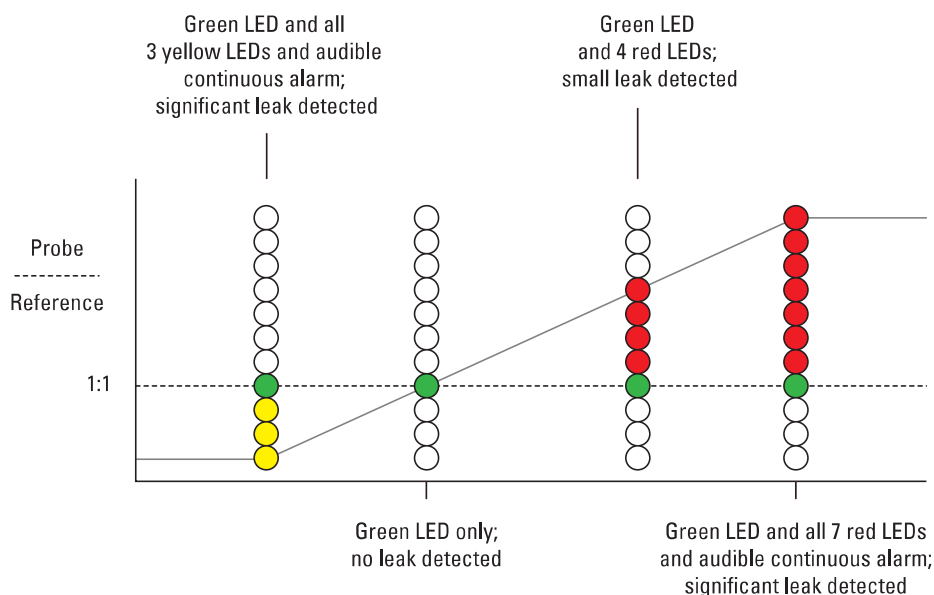
The Thermo Scientific™ GLD Pro Gas Leak Detector is specifically designed for use with gas chromatography instruments. Detection of leaks allows the user to reduce detector noise, provide a stable baseline, reduce carrier gas by minimizing waste, and maximize the lifetime of the analytical column by minimizing the presence of oxygen and other impurities in the carrier gas.

- Suitable for detection of a wide range of laboratory gases
- Push button on/off switch
- Push button zero function
- Automatic shutoff (5 minutes)
- LED light indicator for intensity of leak
- Rechargeable battery (up to 6 hrs. operation)
- Durable storage case
- Probe holder
- One year warranty



GLD Pro gas leak detector

Description	Cat. No.	Quantity
GLD Pro Leak Detector	66002-001	1 Each
Small Probe Adaptor	66002-003	1 Each
Soft-Sided Carry Case (Leak Detector not included)	66002-002	1 Each



Learn more at thermofisher.com/GCtools

GFM pro electronic flowmeter

Measure and monitor flow quickly and efficiently

The Thermo Scientific™ GFM Pro Flowmeter is specifically designed for use with gas chromatography instruments. This versatile product is an electronic device capable of measuring volumetric flow for all types of gases. Real-time measurements can be made for various types of flow paths including continually changing gas types. The unit is portable so it can be hand-held or it also has an optional stand for bench-top convenience.

- Compact ergonomic design features side grips for added durability
- Easy-to-use interface features over-range warning indicator and auto-shutoff
- Measurement range of 0.5-500mL/min
- Accuracy of $\pm 2\%$ of flow or $\pm 0.2\text{mL/min}$, whichever is greater
- Data output via USB port
- Calibration: traceable to NIST primary standards
- Explosion-proof rating for flammable and explosive gases
- CE certified
- Uses 2-AA batteries
- Re-calibration service available



GFM Pro electronic flowmeter

Description	Cat. No.	Quantity
GFM Pro Flowmeter	66002-010	1 Each
Soft-Sided Carry Case (Flowmeter not included)	66002-002	1 Each
GFM Pro Flowmeter Re-Calibration	66002-GFMCAL	1 Each

