



22241

Viton® O-Rings for Agilent GCs

Fit split (6.3 mm OD) or splitless (6.5 mm OD) liners.

Description	Max Temp	Similar to Agilent Part #	10-pk. cat.#	50-pk. cat.#
Viton O-Rings for Agilent GCs	300 °C	5188-5365	22241	22242



22684

Liner Seals for CIS4 and PTV

Description	Max Temp	Similar to Agilent Part #	Similar to Gerstel Part #	qty.	cat.#
Liner Seals for CIS4 and PTV	450 °C	5182-9749	007541-005-00	5-pk.	22684



20296

Graphite O-Rings for Agilent and Bruker/Varian 1177 Injectors

Excellent thermal stability at injection port temperatures up to 450 °C!

Description	Max Temp	Similar to Agilent Part #	10-pk. cat.#	50-pk. cat.#
6.35 mm ID Graphite O-Rings for split liners	450 °C	5180-4168	20296	20297
6.5 mm ID Graphite O-Rings for splitless liners	450 °C	5180-4173	20298	20299



22336

Replacement Viton® O-Rings for use with the Agilent Flip Top Inlet Sealing System

Description	Similar to Agilent Part #	qty.	cat.#
Viton Replacement O-Rings for use with the Agilent Flip Top Inlet Sealing System	5188-5366	10-pk.	22336



21409

Silver PTV Seals for Agilent 6890 GCs

Description	Similar to Agilent Part #	qty.	cat.#
Silver PTV Seals for Agilent 6890 GCs	5182-9763	5-pk.	21409



PTV Inlet Adaptor Kit for Gerstel CIS 3 and CIS 4 PTV Inlets

- Meets original manufacturer's performance.
- Includes inlet adaptor, silver PTV seal, and slotted capillary nut.

Description	Similar to Gerstel Part #	qty.	cat.#
PTV Inlet Adaptor Kit for 0.25 and 0.32 mm ID Columns	007259-045-00	kit	22350
Silver PTV Seals	002841-005-00	5-pk.	21409
PTV Slotted Capillary Column Nut	001268-005-00	2-pk.	22349
Liner Seal Pre-Seat Tool	007542-000-00	ea.	22352



22223

GRAPHPACK® 2M Ferrules for Gerstel CIS 3 and CIS 4 PTV Inlets

Fits Column ID	Similar to Gerstel Part #	qty.	cat.#
0.25 mm	001805-040-00	10-pk.	22223
0.32 mm	001805-045-00	10-pk.	22224
0.53 mm	001805-007-00	10-pk.	22225

Merlin Microseal Septa for Agilent GCs

- Allow operation from 3 to 100 psi (general-purpose Microseal septa) or 1 to 45 psi (low-pressure Microseal septa).
- 400 °C max injection port temperature.

The advantages of the Merlin Microseal septum include elimination of septum coring; longer life; and consistent, low needle-insertion force. The Microseal septum incorporates two separate sealing mechanisms. These sliding seals eliminate septum coring and the resulting accumulation of septum crumbs in the injection port liner.

The Microseal septum uses a 23-gauge (0.63 mm, 0.025") needle or probe with a blunt, truncated conical tip. Since the syringe plunger end details are determined by manual or autosampler compatibility, often a removable needle syringe is an effective way to match both of these requirements. No adapter is required for the Agilent inlet. Installation is simple, requiring no modification of the injection port.



Description	Merlin #	Similar to Agilent Part #	qty.	cat.#
General Purpose Kit for Agilent GCs (3 to 100 psi)				
Nut & 2 General Purpose (#410) Microseals	404	5181-8833	kit	22810
Nut & 1 General Purpose (#410) Microseal	405	5182-3442	kit	22811
Low Pressure Kit for Agilent GCs (1 to 45 psi)				
Nut & 2 Low Pressure (#310) Microseals	304		kit	22813
Nut & 1 Low Pressure (#310) Microseal	305	5181-8816	kit	22814
Replacement Microseals				
General-Purpose Microseal (most applications, 3 to 100 psi)	410	5182-3444	ea.	22812
Low-Pressure Microseal (1 to 45 psi)	310	5181-8815	ea.	22815
Microseal for SPME Applications (3 to 100 psi)	21-01W		ea.	22782
Replacement Microseal Nut	403	5182-3445	ea.	22809

Note: Merlin Microseal septa require a 23-gauge (0.63 mm, 0.025") needle or probe with a blunt, truncated conical tip. Compatible syringes and replacement needles are available at www.restek.com.

Merlin MicroShot™ Injector

- NIST traceability assures accurate injections.
- Fixed volume reduces sampling error.
- Saves time—no need to transfer to autosampler vials.
- Prevents bent syringe plungers.
- Five injection volumes available.*

Increase the accuracy and reproducibility of manual injections with the Merlin MicroShot™ injector. This new injector is calibrated to NIST reference standards to assure accurate and traceable displacement. Precise repeated injections of the preset volume can be made using a standard autosampler syringe with less variation than when injecting by hand. The trigger mechanism provides rapid sample delivery, which reduces needle residence time in the injection port and minimizes potential sample discrimination.

The Merlin MicroShot™ injector allows convenient sampling from a wide variety of containers, so you can save time by eliminating the need to transfer aliquots into autosampler vials. The design of this unit also includes a plunger support, which protects the syringe plunger and prevents it from bending.

Fits Agilent-style (ball-end plunger) autosampler syringes with either fixed or removable, 23- or 26-gauge needles.



Description	Merlin cat.#	qty.	cat.#
0.1 µL injection volume	701-01	ea.	22226
0.2 µL injection volume	701-02	ea.	22227
0.5 µL injection volume	701-05	ea.	22228
1.0 µL injection volume	701-10	ea.	22229
2.0 µL injection volume	701-20	ea.	22230

*Syringe not included. Requires Agilent-style (ball-end plunger) autosampler syringe.



Thermolite®
Septa



Premium Non-Stick
BTO® Septa

Septa for Agilent GCs

- Preconditioned and ready to use.
- Packaged in ultra-clean blister packs.

Septum Diameter	50-pk. cat.#	100-pk. cat.#
Thermolite Septa (usable to 340 °C inlet temp.)		
5 mm (3/16")	27121	27122
9.5 mm (3/8")	27136	27137
10 mm	27139	27140
11 mm (7/16")	27142	27143
Premium Non-Stick BTO Septa (usable to 400 °C inlet temp.*)		
5 mm CenterGuide	27082	27083
9.5 mm (3/8")	27086	27087
10 mm	27088	27089
11 mm (7/16") CenterGuide	27090	27091

*Minimum recommended operating temperature for premium non-stick BTO septa is 250 °C.

Note: Due to differences in inlet design, the actual septum temperature for a given inlet setpoint can vary by manufacturer.

HANDY septum size chart

Agilent Instrument	Septum Diameter (mm)
5880A, 5890, 6890, 6850, 7890, PTV	11
5700, 5880	9.5/10
On-Column Injection	5

Septum Puller

- Use hooked end for removing septa and O-rings; pointed end works well for removing stuck ferrules or debris.
- Keep several on hand in your laboratory for other uses, too.



Dislodge a stuck ferrule quickly and easily—without scoring the fitting.



Remove a septum without damaging an expensive weldment.



Description	qty.	cat.#
Septum Puller	ea.	20117



Septum Nuts for use with Agilent 5890/6890/6850/7890 Split/Splitless Injectors

- Needle guide allows easy penetration and prevents septum coring.
- Manual injection septum nut allows use of 26-gauge needles for on-column injections.
- Made of high-quality stainless steel.

Description	Similar to Agilent Part #	qty.	cat.#
Septum Nut, Autosampler & PTV (for 23-gauge needles)	18740-60835	ea.	20631
Septum Nut, Manual Injection (for 26-gauge needles)	18740-60835	ea.	21309

Septum Nut Removal Tool

for Agilent 5890/6850/6890/7890 GCs

- Easily remove the septum nut without touching the heated nut—no more burned fingers!
- Unique, ergonomic handle—easy to grip.
- Nut remains in tool for quick reattachment.



Slip tool over septum nut...



loosen nut...

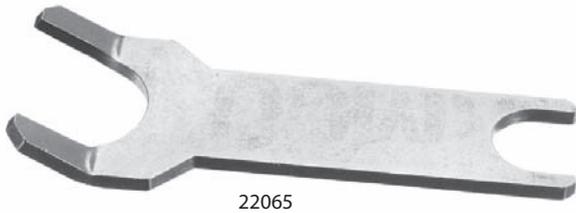


and remove, avoiding hot metal surfaces.



Septum nut remains in tool until reinstalled.

Description	qty.	cat.#
Septum Nut Removal Tool for Agilent 5890/6890/6850/7890 GCs	ea.	24918



22065

Inlet Wrench for Agilent 5890/6850/6890 GCs

- Use to remove the septum nut and weldments during GC maintenance.
- Use the smaller end to remove the septum nut.
- Use the larger end to tighten the split/splitless weldment nut.
- High-quality stainless steel construction.
- Meets original equipment performance.

Description	Similar to Agilent Part #	qty.	cat.#
Inlet Wrench for Agilent 5890/6850/6890 GCs	19251-00100	ea.	22065

Rethreading Tool for Agilent Split/Splitless Injection Ports

Worn and damaged threads can allow oxygen into the system—compromising analytical results and destroying columns. The built-in guide helps prevent cross-threading.



23018



Repair damaged injection port threads!

Screw the tool completely onto the injection port in a clockwise direction. Unscrew the tool and inspect the threads, repeat as necessary. When done, wipe threads with methanol to remove any debris.

Description	qty.	cat.#
Rethreading Tool	ea.	23018



21393

Injection Port Repair Tool for Agilent Split/Splitless Injection Ports

- Remove contaminants, achieve a better seal.
- Cleans critical inlet seal areas.

Description	qty.	cat.#
Injection Port Repair Tool for Agilent Split/Splitless Injection Ports (includes: a handle and brush adaptor, 5 medium sanding disks, 5 fine sanding disks, a 6.5 mm bore brush, & a 7 mm bore brush)	ea.	21393
Replacement Sanding Disks (5 fine & 5 medium)	10-pk.	22689
Replacement Bore Brushes (one 6.5 mm & one 7 mm)	2-pk.	21353



22181

Inlet Maintenance Kit for Agilent GCs

- Includes the most common consumable GC supplies and tools.
- All parts meet or exceed performance of instrument manufacturer's parts.
- Parts list makes reordering easy.

Inlet kit includes:

- 0.4, 0.5, and 0.8 mm ID graphite ferrules
- Viton® O-rings
- Capillary nuts
- Inlet seals
- Reducing nut
- Scoring wafer
- 11 mm Thermo-lite® septa
- 4.0 mm single taper liner
- 4.0 mm split liner with wool
- Capillary column caps
- 1/4" x 5/16" wrench
- Septum puller
- Installation gauge
- Wire cleaning brush
- Jet reamers/ferrule removers
- Inlet liner removal tool
- Septa nut removal tool

Description	qty.	cat.#
Inlet Maintenance Kit	kit	22181



Stainless Steel



Brass

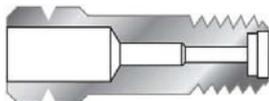


Capillary Column Nut

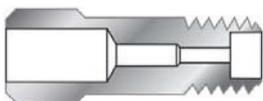
Reducing Nut



Capillary Column Nuts for Agilent 5890/6850/6890/7890 GCs
Available in brass or stainless steel.



Choose for use with "compact" Agilent-style ferrules...



or for use with standard ferrules.

Extended Capillary Column Nuts

for Agilent 5890/6850/6890/7890 GCs

- Visible below inlet insulating cup for easy, breakage-free column installation without removing cup.
- Finger-tight design to allow wrench-free use.
- Available for standard (1/16") and compact (Agilent-style) ferrules.
- Made from high-quality stainless steel.
- Meets or exceeds original manufacturer's performance.

Description	Similar to Agilent Part #	qty.	cat.#
For use with "compact" Agilent-style ferrules.			
Stainless Steel Capillary Column Nut	5181-8830	2-pk.	21884
Brass Capillary Column Nut	5181-8830	2-pk.	21878
For use with standard 1/16"-type ferrules.*			
Stainless Steel Capillary Column Nut	05921-21170	2-pk.	20883
Brass Capillary Column Nut	05921-21170	2-pk.	21879

*Designed to fit a wider variety of 1/16" ferrules

Description	qty.	cat.#
Extended Capillary Column Nut Kit for standard 1/16" ferrules Includes: extended reducing nut and extended capillary column nut for standard 1/16" ferrules	kit	22633
Extended Capillary Column Nut Kit for compact ferrules Includes: extended reducing nut and extended capillary column nut for compact ferrules	kit	22634
Extended Reducing Nut	ea.	22635
Extended Capillary Column Nut for standard 1/16" ferrules	ea.	22636
Extended Capillary Column Nut for compact ferrules	ea.	22637

free literature

GC Column Installation Made Easier with Extended Reducing Nuts for the Agilent® Split/Splitless Inlet

Download your free copy from

www.restek.com

lit. cat.# GNAR2056-UNV



Sky
Inlet Liners

True Blue Performance

Exceptionally inert Sky® inlet liners with state-of-the-art deactivation improve trace-level analysis—and now come with a 100% satisfaction guarantee!*

See pages 193-202 or visit www.restek.com/sky

* For details on our 100% satisfaction guarantee, visit www.restek.com/sky

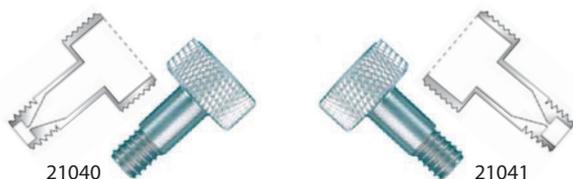
Hot Swap Capillary Column Nuts

- No more burned fingers!
 - No more downtime waiting for injector parts to cool down.
- Never worry again about burned fingers or having to wait for the injector to cool down. The Hot Swap capillary column nut allows you to change your capillary column while the injector temp is still hot.



Description	qty.	cat.#
For use with "compact" Agilent-style ferrules.		
Hot Swap Capillary Column Nut	ea.	22348
For use with standard 1/16"-type ferrules.		
Hot Swap Capillary Column Nut	ea.	22347

NOTE: For proper operation, oven fan must be kept operational during change out or risk of burn may occur.



Finger-Tight Capillary Column Nuts

- Allow wrench-free column installations.
- Available for standard (1/16") and compact (Agilent-style) ferrules.
- Made from high-quality stainless steel.

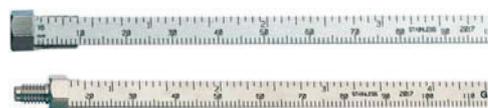
Description	Similar to Agilent Part #	qty.	cat.#
For use with "compact" Agilent-style ferrules.			
Finger-Tight Capillary Column Nuts	5020-8293, 5020-8292	2-pk.	21040
For use with standard 1/16"-type ferrules.			
Finger-Tight Capillary Column Nuts		2-pk.	21041

Injector/Detector Plug Nuts

- Use to cap off an injector to isolate leaks.
- Use to cap off a detector for thermal cleaning.
- Use to check a detector or make-up gas flow rate.
- Use to cap off a detector and prevent hydrogen from accidentally diffusing into the oven from an unused detector base.



Description	Similar to Agilent Part#	qty.	cat.#
Injector/Detector Plug Nuts	5020-8294	2-pk.	21883



Easily seat ferrules for consistent installations!

Capillary Installation Gauge for Agilent GCs

- Seats graphite* ferrules onto column for consistent installations.
- Prevents crushed column ends.
- Made from high-quality stainless steel.

Description	qty.	cat.#
Capillary Installation Gauge for Agilent-style fittings (compact ferrules)	ea.	21034
Capillary Installation Gauge for 1/16" fittings (1/16" ferrules)	ea.	21399

*For use with graphite ferrules only.

RESTEK[®]
Pure Chromatography

Restek
Recommends!



A dual Vespel® ring inlet seal eliminates the need for a washer!

Patented

Dual Vespel® Ring Inlet Seals Washerless, Leak-Tight Seals for Agilent GCs

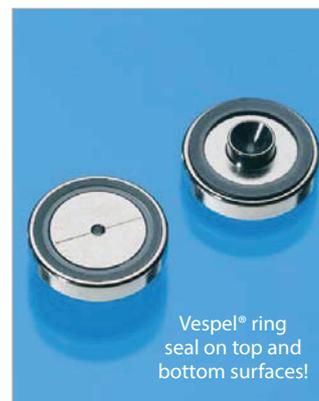
- Does not require a separate washer.
- Requires less torque to seal.
- Does not require retightening of reducing nut after several oven cycles.
- Extends column lifetime by preventing oxygen from reaching the column.
- Same price as the regular inlet seals with washers.
- Siltek® treatment provides enhanced inertness versus stainless steel.



21238

21240

21248



Vespel® ring seal on top and bottom surfaces!

Extend column lifetime!

0.8 mm ID Dual Vespel Ring Inlet Seal	2-pk. cat.#	10-pk. cat.#	50-pk. cat.#
Gold-Plated	21240	21241	23418
Siltek-Treated	21242	21243	23419
Stainless Steel	21238	21239	23420

1.2 mm ID Dual Vespel Ring Inlet Seal	2-pk. cat.#	10-pk. cat.#
Gold-Plated	21246	21247
Siltek-Treated	21248	21249
Stainless Steel	21244	21245



22083

22085

Dual Vespel® Ring Cross-Disk Inlet Seals for Agilent GCs

- Ideal for high-flow split applications >500 mL/min.
- Washerless, leak-tight seals.

0.8 mm ID Dual Vespel Ring Cross-Disk Inlet Seal	2-pk. cat.#	10-pk. cat.#
Gold-Plated	22083	22084
Siltek-Treated	22085	22086

Restek innovation!



Patented



1/16" Adaptor Fitting

Flip Seal® Dual Vespel® Ring Inlet Seals

- Reversible, two-sided design allows significantly more analyses than other seals, at the same price—simply use, flip, then use again!
- Vespel® ring embedded in top and bottom surface eliminates need for a washer.
- Highly inert gold or Siltek®-deactivated seals reduce breakdown and adsorption of active compounds, maximizing component transfer to GC column.
- Very little torque required to make seal—reduces operator variability.

Flip Seal Dual Vespel Ring Inlet Seal	2-pk. cat.#	10-pk. cat.#
Gold-Plated	23411	23413
Siltek-Deactivated	23412	23414

Flip Seal Dual Vespel Ring Inlet Seal Kit	qty.	cat.#
Includes: gold-plated inlet seal, reducing nut adaptor, 1/16" SS nut	kit	23406

Note: The Flip Seal® inlet seal requires a special reducing nut adaptor fitting, which is included in the kit. The Flip Seal® Adaptor can be used with standard 1/16" ferrules.

Replacement Inlet Seals With Washers

- Siltek® treatment provides enhanced inertness versus stainless steel.
- All seals include washers.

Replacement Inlet Seals for Agilent GCs

The inlet seal at the base of the Agilent 5890/6890/7890 GC injection port contacts the sample and must be changed frequently to prevent adsorption of active compounds. In addition, septum fragments and sample residue accumulate on the disk surface, requiring disk replacement.

To reduce breakdown and adsorption of active compounds, use Siltek® or gold-plated seals.

Single-Column 0.8 mm ID (Opening)	Similar to Agilent Part #	2-pk. cat.#	10-pk. cat.#	50-pk. cat.#
Gold-Plated	5188-5367	21317	21318	23415
Siltek-Treated		21319	21320	23416
Stainless Steel	18740-20880	21315	21316	23417
0.25/0.32 mm ID Dual-Column 1.2 mm ID (Opening)		2-pk. cat.#	10-pk. cat.#	
Gold-Plated		21305	21306	
Siltek-Treated		21307	21308	
Stainless Steel		20390	20391	
0.53 mm ID Dual-Column 1/16-inch ID (Opening)		2-pk. cat.#	10-pk. cat.#	
Stainless Steel		20392	20393	



Note: The 1.2 mm inlet seal is recommended when installing two columns using a two-hole Vespel®/graphite ferrule.

All seals include washers.

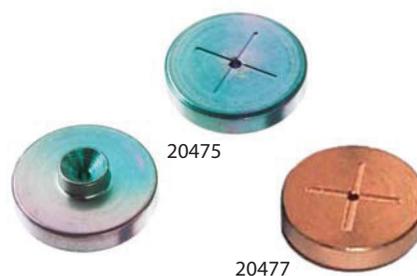
Replacement Inlet Seal Washers

Description	Similar to Agilent Part #	qty.	cat.#
Replacement Inlet Seal Washers	5061-5869	15-pk.	21710

Cross-Disk Inlet Seals for Agilent GCs

- Ideal for high-flow split applications >500 mL/min on Agilent 5890 GCs.
- Siltek® treatment provides enhanced inertness versus stainless steel.
- All seals include washers.

0.8 mm ID Cross-Disk Inlet Seal	Similar to Agilent Part #	2-pk. cat.#	10-pk. cat.#
Gold-Plated	5182-9652	20477	20476
Siltek-Treated	—	20475	20474
1.2 mm ID Cross-Disk Inlet Seal	Similar to Agilent Part #	2-pk. cat.#	10-pk. cat.#
Gold-Plated	—	21009	21010
Siltek-Treated	—	21011	21012



Silver PTV Seals for Agilent 6890 GCs

Description	Similar to Agilent Part #	qty.	cat.#
Silver PTV Seals for Agilent 6890 GCs	5182-9763	5-pk.	21409

