

Supplies for Shimadzu Instruments: Inlet Liners

	Split Liners for Shimadzu 14A GCs	Benefits/Uses:	ID*/OD & Length (mm)	Similar to Shimadzu part #	ea.	cat.# 5-pk.	25-pk.
Split		universal, for most common analyses	3.5 ID 5.0 OD x 99	221-32544-01	20860	20861	20862
Cyclosplitter®		dirty samples, many injections before cleaning required	3.5 ID 5.0 OD x 99	—	20870	20871	—
Laminar Cup Splitter		high MW compounds	3.5 ID 5.0 OD x 99	—	20868	20869	—

	SPLITLESS LINERS FOR SHIMADZU 14A GCs	Benefits/Uses:	ID*/OD & Length (mm)	Similar to Shimadzu part #	ea.	cat.# 5-pk.	25-pk.
3.5MM SPLITLESS		trace samples	3.5 ID 5.0 OD x 99	221-32544-00	20863	20864	20865

	DI LINERS FOR SHIMADZU 14A GCs (0.25/0.32/0.53MM ID)	Benefits/Uses:	ID*/OD & Length (mm)	Similar to Shimadzu part #	ea.	cat.# 5-pk.	25-pk.
UNILINER®		trace, active samples, high recovery & linearity	3.5 ID 5.0 OD x 99	—	20876	20877	—
CYCLO-UNILINER®		trace, dirty, high MW active samples, high recovery & linearity	3.5 ID 5.0 OD x 99	—	20893	20894	—

	SPLIT LINERS FOR SHIMADZU 17A, 2010, AND 2014 GCs	Benefits/Uses:	ID*/OD & Length (mm)	Similar to Shimadzu part #	ea.	cat.# 5-pk.	25-pk.
1MM SPLIT		purge & trap, fast GC	1.0 ID 5.0 OD x 95	—	20976	20977	20978
3.5MM SPLIT		universal, for most common analyses	3.5 ID 5.0 OD x 95	221-41444-01	22283	22284	22285
SPLIT PRECISION™ LINER W/ WOOL		dirty samples, trace samples	3.5 ID 5.0 OD x 95	—	21020	21021	—
CYCLOSPLITTER®		dirty samples, many injections before cleaning required	3.5 ID 5.0 OD x 95	—	22072	22073	—

	SPLITLESS LINERS FOR SHIMADZU 17A, 2010, AND 2014 GCs	Benefits/Uses:	ID*/OD & Length (mm)	Similar to Shimadzu part #	ea.	cat.# 5-pk.	25-pk.
3.5MM SPLITLESS		universal, trace samples	3.5 ID 5.0 OD x 95	221-48335-01	22286	22287	—
DOUBLE GOOSENECK		reduces backflash and catalytic decomposition	3.5 ID 5.0 OD x 95	—	20958	20959	20960
SINGLE GOOSENECK		reduces backflash, also operates in DI mode	3.5 ID 5.0 OD x 95	—	20961	20962	20963

*Nominal ID at syringe needle expulsion point.

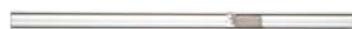
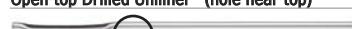
ordering note

For descriptions of liner deactivations, packings, and tools, see pages 141-143.

All liners are
100%
deactivated

All liners are shipped intermediate polarity (IP) deactivated unless otherwise requested.

Supplies for Shimadzu Instruments: Inlet Liners

Split/Splitless Liners for Shimadzu 17A, 2010, and 2014 GCs	Benefits/Uses:	ID*/OD & Length (mm)	Similar to Shimadzu part #	ea.	cat.# 5-pk.	25-pk.
	universal, for most common analyses	3.5 ID 5.0 OD x 95	221-41444-00	20955	20956	20957
Split/Splitless w/ Wool						
	universal, for most common analyses	3.5 ID 5.0 OD x 95	—	20955-213.1	20956-213.5	20957-213.25
Siltek® Split/Splitless w/ Wool						
SPME Liner for Shimadzu 17A, 2010, and 2014 GCs	Benefits/Uses	ID*/OD & Length (mm)	Similar to Shimadzu part #	ea.	cat.# 5-pk.	25-pk.
	ideal for low volume SPME applications	.75 ID 5.0 OD x 95	—	22278	22279	—
SPME Liner						
DI Liners for Shimadzu 17A, 2010, and 2014 GCs (0.25/0.32/0.53mm ID)	Benefits/Uses	ID*/OD & Length (mm)	Similar to Shimadzu part #	ea.	cat.# 5-pk.	25-pk.
	trace, dirty, high MW active samples, high recovery & linearity	3.5 ID 5.0 OD x 95	—	21713	21719	—
Uniliner® w/ Wool						
	trace, active samples, high recovery & linearity	3.5 ID 5.0 OD x 95	—	21285	21286	—
Open-top Drilled Uniliner® (hole near top)						
	trace, active samples, high recovery & linearity	3.5 ID 5.0 OD x 95	—	21287	21288	—
Open-top Drilled Uniliner® (hole near bottom)						
	trace, active samples, high recovery & linearity	3.5 ID 5.0 OD x 95	—	21289	21290	—
Gooseneck Drilled Uniliner® (hole near top)						
	trace, active samples, high recovery & linearity	3.5 ID 5.0 OD x 95	—	21291	21292	—
Gooseneck Drilled Uniliner® (hole near bottom)						

tech tip

Drilled Uniliner® Liners

Use the Drilled Uniliner® liner with the hole near the bottom for semivolatile analysis or when compounds of interest could be affected by a tailing solvent peak. Use the Drilled Uniliner® liner with the hole near the top for chlorinated pesticides analysis, aqueous injections, as well as for analysis in which the compounds of interest elute away from the solvent peak.

Liners for Shimadzu 17A PTV GCs	Benefits/Uses	ID*/OD & Length (mm)	Similar to Shimadzu part #	ea.	cat.# 5-pk.	25-pk.
	trace, dirty, high & low MW active samples	1.6 ID 4.0 OD x 95	225-09212-01	21705	21706	21707
17A PTV Liner w/ Wool						

*Nominal ID at syringe needle expulsion point.

SILTEK®
deactivation

Siltek® Treated Metal Inlet Liners for Shimadzu GCs

- Won't crack, chip or break like glass liners.
- Inertness equivalent to glass liners.
- Excellent response for pesticides, phenols, and other active compounds.

Liner Type (3.5mm ID x 5.0mm OD x 95mm)	qty.	cat.#
95mm Split/Splitless Siltek® Treated Metal Inlet Liners w/Wool	5-pk.	21003



Supplies for Shimadzu Instruments: Column Inlet Parts



Viton® O-Rings for Shimadzu 17A, 2010, and 2014 GCs

Description	Max. temp.	Similar to Shimadzu part #	qty.	cat.#
Viton® O-Rings for Shimadzu 17A, 2010, and 2014 GCs	250°C	036-11203-84	10-pk.	21477



Graphite O-Rings for Shimadzu 17A, 2010, and 2014 GCs

Description	Max. temp.	Similar to Shimadzu part #	qty.	cat.#
Graphite O-Rings for Split Liners	450°C	221-48393-91	5-pk.	20243
Graphite O-Rings for Splitless Liners	450°C	221-47222-91	5-pk.	20244



Plug Septa for Shimadzu GCs

Thermolite® Septa (usable to 340°C inlet temp.)		IceBlue™ Septa (usable to 250°C inlet temp.)		BTO® Septa (usable to 400°C inlet temp.)	
qty.	cat.#	qty.	cat.#	qty.	cat.#
25-pk.	27153	50-pk.	27170	50-pk.	27118
50-pk.	27154	100-pk.	27171	100-pk.	27119
100-pk.	27155				



Septum Nut for Shimadzu 17A, 2010, and 2014 GCs

- One piece design for ease of installation and removal.
- Made of clear anodized aluminum and high-quality stainless steel.

Description	Similar to Shimadzu part #	qty.	cat.#
Septum Nut for Shimadzu 17A, 2010, and 2014 GCs	221-41286-00	ea.	22079



Injector Nut Kit for Shimadzu 17A, 2010, and 2014 GCs

- Includes 17A injector nut, 0.4mm graphite ferrule, and 1/16-inch stainless steel capillary nut.

Description	qty.	cat.#
Injector Nut Kit for Shimadzu 17A, 2010, and 2014 GCs	kit	21895
Siltek® Treated Injector Nut Kit for Shimadzu 17A, 2010, and 2014 GCs	kit	22331



Capillary Nut for Shimadzu 17A, 2010, and 2014 GCs

- Meets manufacturer's performance.

Description	Similar to Shimadzu part #	qty.	cat.#
Capillary Nut for Shimadzu 17A, 2010, and 2014 GCs	221-41533-00	2-pk.	22688



Restek Enhanced Capillary Nut for Shimadzu 17A, 2010, and 2014 GCs

- Restek's design eliminates the slot, increasing lifetime and durability.
- Meets or exceeds manufacturer's performance.

Description	Similar to Shimadzu part #	qty.	cat.#
Restek Enhanced Capillary Nut for Shimadzu 17A, 2010, and 2014 GCs	221-41533-00	2-pk.	20375

Supplies for Shimadzu Instruments: Inlet Fittings, Cool Tools

5mm Ferrules for Shimadzu 17A GCs

- For use with packed columns.
- Graphite composition.

Description	qty.	cat.#
5mm Ferrules for Shimadzu 17A GCs	10-pk.	21121



5mm Stainless Steel Uniliner® Liner Adaptor Fitting for Shimadzu Packed Column GCs

Shimadzu GCs do not require a standard 1/4-inch Uniliner® liner adaptor because the injection port cavity will accept 5mm Uniliner® liners. This specially-designed fitting allows a Shimadzu packed column injection port to accept 0.53mm ID columns. Use a Shimadzu 5mm nut and ferrule to install the adaptor fitting into the injection port. Includes a 1/16-inch nut and 0.8mm ID graphite ferrule.



Description	qty.	cat.#
5mm Stainless Steel Uniliner® Liner Adaptor Fitting for Shimadzu Packed Column GCs	ea.	20312

Injector Wrench for Shimadzu 17A, 2010, and 2014 GCs

- Designed specifically for removing Shimadzu injection ports.
- High-quality stainless steel construction.

Description	Similar to Shimadzu part #	qty.	cat.#
Injector Wrench for Shimadzu 17A, 2010, and 2014 GCs	221-46977-00	ea.	21159



Capillary Installation Gauge for Shimadzu 17A, 2010, & 2014 GCs

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

Description	qty.	cat.#
Capillary Installation Gauge for Shimadzu 17A, 2010, and 2014 GCs	ea.	22333



Supplies for Shimadzu Instruments: Tools



Open-End Wrench Set for use with Shimadzu 17A, 2010, and 2014 Capillary Installation Gauge

Description	qty.	cat.#
$\frac{1}{4}$ " x $\frac{5}{16}$ " and 10mm x 11mm Open-End Wrench Set for use with Shimadzu 17A, 2010, and 2014 Capillary Installation Gauge	ea.	22334

Everything you need
in one complete kit!

Make Life Easier (MLE) Capillary Tool Kit for Shimadzu GCs

Includes:

- capillary installation gauge for Shimadzu GCs
- injector wrench for Shimadzu GCs
- $\frac{1}{8}$ ", $\frac{3}{16}$ ", and $\frac{1}{4}$ " nylon brushes
- $\frac{1}{4}$ ", $\frac{3}{16}$ ", and $\frac{1}{16}$ " stainless steel wire tube brushes
- stainless steel surface brush
- 6 stainless steel jet reamers (0.25–0.65mm OD)
- $\frac{1}{4}$ " x $\frac{5}{16}$ " open end wrench
- $\frac{3}{8}$ " x $\frac{7}{16}$ " open end wrench
- 6mm x 7mm open end wrench
- 8mm x 10mm open end wrench
- 16mm x 17mm open end wrench
- rubber-tipped slide-lock tweezers
- scoring wafers with handles
- inlet liner removal tool
- septum puller
- mini wool puller/inserter tool
- 4-inch tapered needle file
- swivel head flashlight
- mini hand drill set
- 15cm compact steel ruler
- pocket magnifier
- high temperature string (1 meter)
- pipe cleaner (12-inch)
- cotton tip swabs (pk. of 25)



Description	qty.	cat.#
MLE Capillary Tool Kit for Shimadzu GCs	kit	22182



did you know?

Restek offers a full line of Parker gas generators.
Gas generators are a safe and cost-effective alternative
to gas cylinders. See pages 242-245 for more information.