

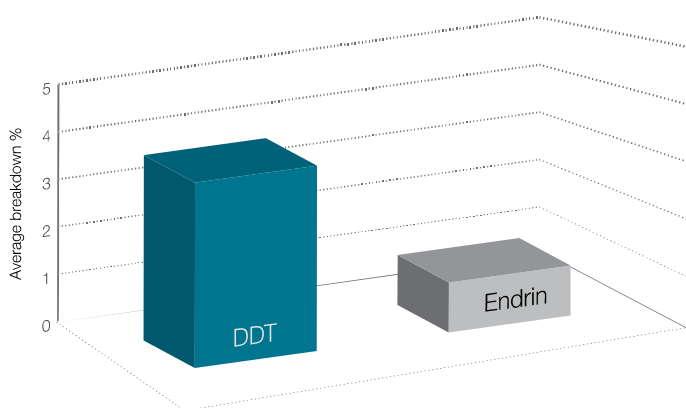
# Injection port liners

## LinerGOLD GC liners

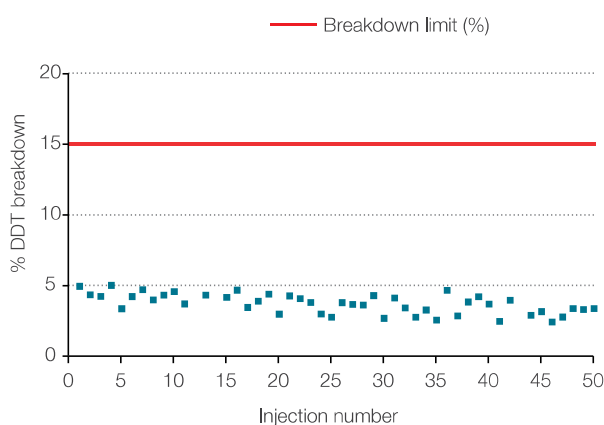
The GOLD standard in GC liner performance

Learn more at

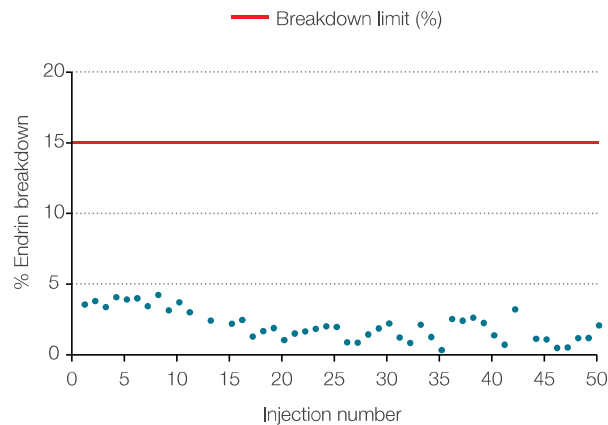
[thermofisher.com/gcparts](https://thermofisher.com/gcparts)



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



- **Increased accuracy and sensitivity in analysis** – Thermo Scientific™ LinerGOLD™ GC liners 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. LinerGOLD GC liners are manufactured and tested to ensure that you have confidence with every liner that it installed onto your GC system














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



## LinerGOLD GC liners continued





### Thermo Scientific™ LinerGOLD™ GC Liners for Thermo Scientific TRACE 1300/1600 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	<a href="#">453A2265-UI</a>	<a href="#">453A1262-UI</a>
	Split/splitless straight liner	4 x 6.3	78.5	No	<a href="#">453A1295-UI</a>	<a href="#">453A2292-UI</a>
	Splitless/split liner with single taper	4 x 6.5	78.5	No	<a href="#">453A1345-UI</a>	<a href="#">453A2342-UI</a>
	Splitless/split liner with single taper	4 x 6.5	78.5	Quartz wool	<a href="#">453A1925-UI</a>	<a href="#">453A2922-UI</a>
	Splitless liner with double taper	4 x 6.5	78.5	No	<a href="#">453A1355-UI</a>	<a href="#">453A2352-UI</a>
	Precision split/splitless liner	4 x 6.3	78.5	Quartz wool	<a href="#">453A1255-UI</a>	<a href="#">453A1252-UI</a>
	Direct straight liner	1 x 6.3	78.5	No	<a href="#">453A1335-UI</a>	<a href="#">453A2332-UI</a>
-	LinerGOLD mixed liner pack*	Mixed	78.5	Mixed	<a href="#">453TH002-UI</a>	—
	LinerGOLD double taper cyclo liner	4 x 6.5	78.5	No	<a href="#">453A1365-UI</a>	—
	LinerGOLD split cyclo liner	4 x 6.3	78.5	No	<a href="#">453A1375-UI</a>	—
	LinerGOLD straight liner	1.7 x 6.5	78.5	No	<a href="#">453A0415-UI</a>	—
	LinerGOLD straight liner	1.3 x 6.5	78.5	No	<a href="#">453A0411</a> **	—

\* LinerGOLD mixed liner pack (containing one liner of 453A1335-UI, 453A1345-UI, 453A1925-UI, 453A1295-UI, 453A2265-UI)

\*\* 3/pack











### LinerGOLD GC liners for Thermo Scientific™ TRACE™ Ultra and FOCUS instruments

	Injection type	ID x OD (mm)	Length (mm)	Packing	Cat. no. (5 pack)
	Direct straight liner	5 x 8	105	No	<a href="#">45350030-UI</a>
	Splitless liner	3 x 8	105	No	<a href="#">45350032-UI</a>
	Splitless liner	5 x 8	105	No	<a href="#">45350033-UI</a>
	Precision liner	5 x 8	105	Quartz wool	<a href="#">453T1905-UI</a>
	Splitless Precision liner	5 x 8	105	Quartz wool	<a href="#">453T2999-UI</a>







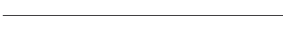






## Injection port liners for Thermo Scientific instruments

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

### Thermo Scientific™ Deactivated GC Liners for Thermo Scientific TRACE 1300/1600 series 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	<a href="#">453A1335</a>	—
	Split straight liner	4 x 6.3	78.5	Quartz wool	<a href="#">453A2265</a>	<a href="#">453A1262</a>
	Split straight liner	4 x 6.3	78.5	No	<a href="#">453A1295</a>	<a href="#">453A2292</a>
	Split/splitless FocusLiner	4 x 6.3	78.5	Quartz wool	<a href="#">453A1255</a>	<a href="#">453A1252</a>
	Split/splitless FocusLiner with single taper	4 x 6.3	78.5	Quartz wool	<a href="#">453A1315</a>	<a href="#">453A1312</a>
	Split/splitless liner with single taper	4 x 6.3	78.5	No	<a href="#">453A1345</a>	<a href="#">453A2342</a>
	Split/splitless liner with double taper	4 x 6.3	78.5	No	<a href="#">453A1355</a>	—
	Split/splitless liner w/recessed gooseneck	4 x 6.3	78.5	Quartz wool	<a href="#">453A1305</a>	—
	Splitless liner with single taper	4 x 6.3	78.5	Quartz wool	<a href="#">453A1925</a>	<a href="#">453A2295</a>
	Split/splitless mini-lam liner	4 x 6.3	78.5	No	<a href="#">453A2009</a>	—
—	Split/splitless mixed liner sample pack	Mixed	Mixed	Mixed	<a href="#">453TH002</a>	—

### Deactivated GC liners for Thermo Scientific TRACE 1300/1600 series and TRACE ULTRA 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	—	<a href="#">45352054</a>	—
	PTV straight liner	2 x 2.75	120	No	—	<a href="#">45352057</a>	<a href="#">45354057</a>
	PTV straight liner	2 x 2.75	120	No	<a href="#">45322045</a>	—	—
	PTV liner with sintered lining	1.75 x 2.75	120	No	—	<a href="#">45352060</a>	—
	PTV liner with three baffles	1 x 2.75	120	No	—	<a href="#">45352062</a>	—
	PTV SilTek metal liner	1 x 2.75	120	No	<a href="#">45322046</a>	—	—
	PTV SilTek metal liner	2 x 2.75	120	No	<a href="#">45322044</a>	—	—
	PTV SilTek metal liner	2 x 2.75	120	Wool	<a href="#">45322056</a>	—	—
	PTV baffle liner (siltek)	2 x 2.75	120	No	—	<a href="#">453T2120</a>	—
	PTV split liner with recessed gooseneck	2 x 2.75	120	Quartz wool	—	<a href="#">45352070</a>	—
	PTV silcosteel liner for OC	1 x 2.75	120	No	<a href="#">45322052</a>	—	—
	PTV liner with concentric baffle	2 x 2.75	120	No	—	<a href="#">453T2845-UI</a>	—
	PTV liner with five baffles	1 x 2.75	120	No	—	<a href="#">453T2171-UI</a>	—

## Injection port liners for Thermo Scientific instruments continued

### Deactivated 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	<a href="#">45350030</a>	—
	Split straight liner	3 x 8	105	No	<a href="#">45350031</a>	—
	Split straight liner	5 x 8	105	CarboFrit	<a href="#">453T2131</a>	—
	Splitless straight liner	3 x 8	105	No	<a href="#">45350032</a>	—
	Splitless straight liner	5 x 8	105	No	<a href="#">45350033</a>	<a href="#">45354033</a>
	Splitless straight liner	5 x 8	105	CarboFrit	<a href="#">453T2130</a>	—
	Splitless straight liner (SilTek)	3 x 8	105	No	<a href="#">453T2121</a>	—
	Split FocusLiner for 50 mm needle	5 x 8	105	Quartz wool	<a href="#">453T1905</a>	<a href="#">453T4905</a>
	Splitless FocusLiner for 50 mm needle	5 x 8	105	Quartz wool	<a href="#">453T2999</a>	<a href="#">453T4999</a>
	Splitless FocusLiner for 70 mm needle	5 x 8	105	Quartz wool	<a href="#">453T2895</a>	<a href="#">453T4895</a>
	Split/splitless straight liner	0.75 x 2.75	105	No	<a href="#">45352083</a>	—
















### Thermo Scientific™ Liner Sealing Rings for Thermo Scientific instruments

Description	Quantity	Cat. no.
Liner sealing ring for TRACE 1300/1600 series GC SSL injector	5 each	<b>29001320</b>
Liner sealing ring for TRACE 1300/1600 series GC PTV injector	1 each	<b>29001318</b>
Liner sealing ring for TRACE and FOCUS GC SSL injector	10 pack	<a href="#">29033406</a>
Liner sealing ring for TRACE PTV injector	2 pack	<a href="#">29013417</a>
Liner sealing ring for Purge&Trap adaptor	1 each	<b>MI-290AA1-0001</b>



## Injection port liners for Agilent instruments

### Deactivated 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	<a href="#">453A1335</a>	—
	Split straight liner	4 x 6.3	78.5	Quartz wool	<a href="#">453A2265</a>	<a href="#">453A1262</a>
	Split straight liner	4 x 6.3	78.5	No	<a href="#">453A1295</a>	<a href="#">453A2292</a>
	Split/splitless FocusLiner	4 x 6.3	78.5	Quartz wool	<a href="#">453A1255</a>	<a href="#">453A1252</a>
	Split/splitless FocusLiner with single taper	4 x 6.3	78.5	Quartz wool	<a href="#">453A1315</a>	<a href="#">453A1312</a>
	Split/splitless liner with single taper	4 x 6.3	78.5	No	<a href="#">453A1345</a>	<a href="#">453A2342</a>
	Split/splitless liner with double taper	4 x 6.3	78.5	No	<a href="#">453A1355</a>	—
	Split/splitless liner w/recessed gooseneck	4 x 6.3	78.5	Quartz wool	<a href="#">453A1305</a>	—
	Split/splitless FAST FocusLiner	2.3 x 6.3	78.5	Quartz wool	<a href="#">453A1285</a>	<a href="#">453A2282</a>
	Split/splitless FAST FocusLiner with single taper	2.3 x 6.3	78.5	Quartz wool	<a href="#">453A2375</a>	—
	Splitless liner with single taper	4 x 6.3	78.5	Quartz wool	<a href="#">453A1925</a>	—
	Splitless straight liner	2.0 x 6.3	78.5	No	<a href="#">453A2275</a>	—
	Single gooseneck (deactivated metal)	5.2 x 6.3	78.5	No	<a href="#">453A2001</a>	—
	Cyclosplitter liner (deactivated metal)	5.2 x 6.3	78.5	No	<a href="#">453A2002</a>	—
	Split/splitless liner with wool (deactivated metal)	5.2 x 6.3	78.5	Quartz wool	<a href="#">453A2003</a>	—
—	Split/splitless mixed liner sample pack	Mixed	Mixed	No	<a href="#">453AG001</a>	—

### Liner sealing rings for Agilent instrument

Description	Quantity	Cat. no.
Graphite liner sealing ring for Agilent SSL liners	10 pack	<a href="#">290GA243</a>
Viton liner sealing ring for Agilent SSL injector	10 pack	<a href="#">290OA241</a>

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