Spot the difference in the SGE lineup!

SGE GC inlet liner range:

- Easy to choose.
- Easy to use.
- Confidence in your analysis.

SGE Analytical Science

www.sge.com

AUSTRALIA & PACIFIC REGION EUROPE JAPAN USA

Spot the difference in the SGE lineup!

Easy to choose

- Color coded by geometry to simplify your selection.

Easy to use

- Contain o-rings so you're ready to go.

Confidence in your analysis

- Certified deactivation gives you confidence in your analysis.

Choosing the right inlet liner and injection parameter can increase peak areas and reduce detection limits by up to 300%[1].

Customer research conducted by SGE found that a significant number of GC users don't understand the importance of inlet liner selection, or how it contributes to their analysis. The SGE inlet liner range aims to make it simple for all gas chromatographers to select the right liner.

1. Kende, A et al. Chromatographia, 2006; 63 (3/4): 181-7

Easy to choose

For ease of selection so you can optimize your results, SGE has color coded the liners by geometry. Color coding and sample types are listed in the table below.

Color	Injection Technique	Sample Types	Liner Geometry
Dark Green	Splitless	• Trace level analyses. • Active compounds.	Taper / Gooseneck
Blue	Split	• General purpose. • Concentrated samples. • Dirty samples.	FocusLiner™
Aqua	Splitless	• Trace level analyses. • Dirty samples. • Wide boiling point range.	Taper Focus
Orange	Direct	• Trace level analyses. • Active compounds.	ConnecTite™
Purple	Split Splitless	• General purpose. • Concentrated samples. • Dirty samples (only if quartz wool is present) • Gaseous samples (also Purge and Trap, Headspace).	Straight
Yellow	Splitless LVI	• Trace level analyses. • Low boiling point compounds. • Active compounds.	Double Taper
Grey	PTV LVI	• Trace level analyses. • Large volume injections.	PTV/LVI

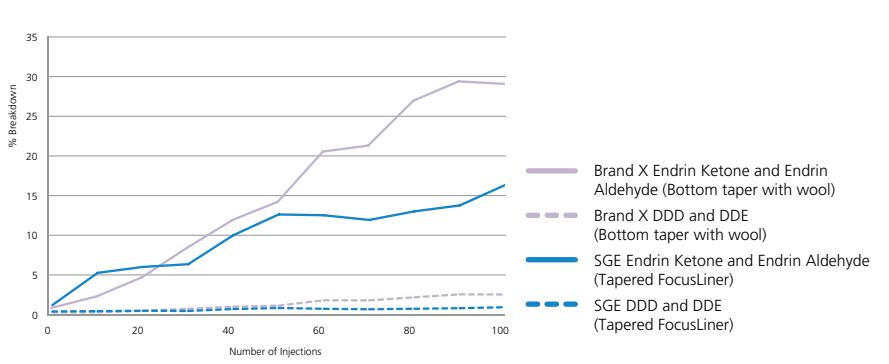
SGE has also created a liner selection tool that can be found on our website: www.sge.com/linertool

Confidence in your analysis

Whether for routine analysis, difficult probes or trace analysis have confidence in your analysis with SGE's inlet liners. While bottom taper with wool is considered the best geometry for trace analysis, the SGE FocusLiner™ delivers optimal performance in all applications.

Confidence for routine analysis - injection after injection

50 ppb 100 Repeat injections comparison Endrin and DDT % breakdown



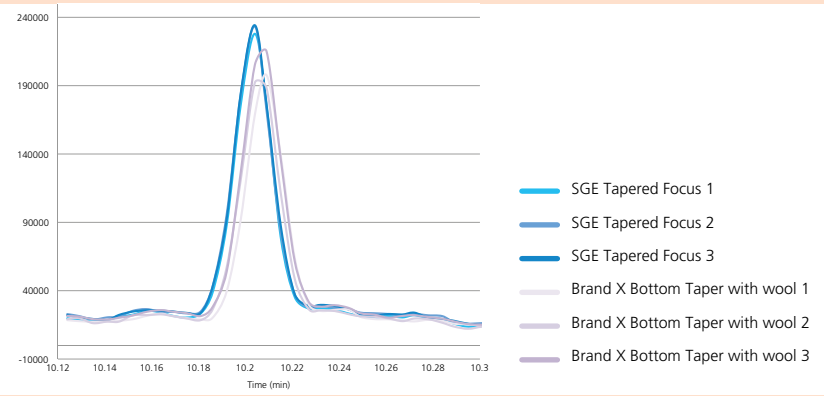
- SGE's Tapered FocusLiner™ shows improved performance compared with competitor's premium deactivated liner.
- Choose the Tapered FocusLiner™ to ensure your analysis is uncompromised injection after injection.

Testing Parameters

50 ppm Endrin and DDT test mix
1 µL Splitless injection @ 250 °C
HT grade Septa (PN: 041898)

Confidence with difficult probes

Liner Comparison -0.5 ng 2, 4-dinitrophenol

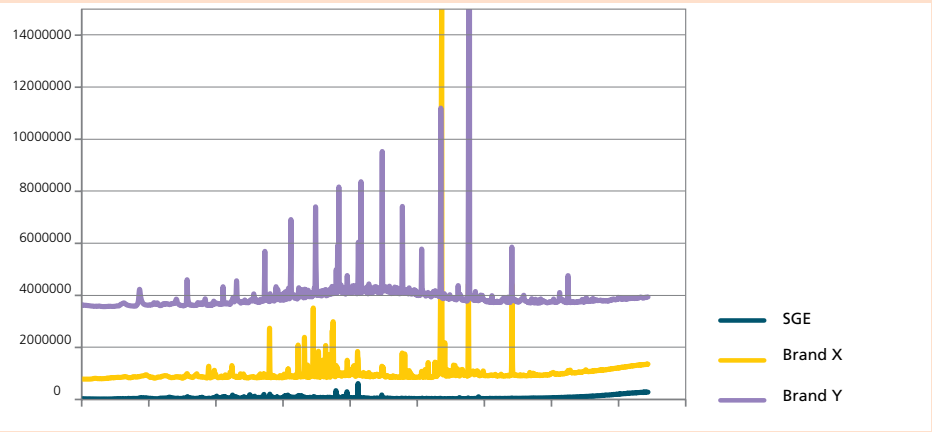


- Reproducible performance with the right choice in liner geometry.

Instrument:	5973 inert MSD and 6890GC
Oven:	40 °C to 80 °C at 10 °C a minute 20 °C a minute to 190 °C hold for 2 minutes 30 °C a minute to 350 °C hold for one minute
Inlet:	4.9 psi 200 °C He
Column:	30 m BPX5 0.25 mm x 0.25 µm (PN: 054101)
GCMS:	Scan 50 to 550
Injection Volume:	1 µL
Test Mix:	Custom SVOC standard mix from AccuStandard S-23011 2000 ug/mL (diluted to 0.5 ppm)

Confidence in your trace analysis

MS scan for Siloxane bleed - thick vs thin film deactivation



- Low siloxane bleed due to SGE's thin film deactivation.

Injection	No injection – gas flow for 5 min
Injector Temp	350 °C
Purge flow	20 ml/min
Oven program	50 °C to 350 °C (20 /min) hold 2.2 mins
Carrier gas	He (1.2 ml/min)
Detector (MS)	50-650 mz
Instrument	Agilent 6890

SGE standard inlet liner deactivation

SGE tests every batch of inlet liners for activity using the EPA 8081B method. This standard method ensures that each batch of inlet liners has less than a 3 % Endrin breakdown (5 ppm standard). SGE validates this quality assurance by including a batch certificate with every pack.

When deactivation REALLY matters

Single pack deactivation certification options:

- Customers who are ISO accredited or follow GLP will benefit from SGE's certified single packs. **Add CERT when ordering.**
- MS ready liners in single packs conditioned and MS tested post deactivation so they are ready for use straight out of the pack. **Add MS when ordering.**

Easy to use

SGE's inlet liners come as a complete, packaged solution:

- 1, 5 and 25 packs.
- Complete with instrument appropriate o-rings or sealing rings.
- Each pack supplied with quality assurance test results.
- SGE blister packs are perforated enabling easy division of the 5 and 25 packs while maintaining blister integrity.
- 25 packs come in a re-usable container, with a range of attractive designs, that will be handy around the lab.

SGE inlet liners, spot the difference.

Easy to choose

Easy to use

Confidence in your analysis

To select the right inlet liner for your instrument, injection and sample – use our selection tool: www.sge.com/linertool

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