

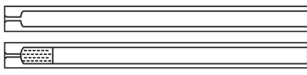


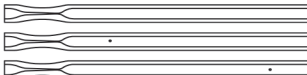


SGE OptChem™ inlet liners



Important considerations when selecting inlet liners

- Must ensure complete vaporization of the sample before it reaches the column entrance
- Must not react with the sample
- The liner volume must be larger than the volume of vaporized sample
- Should minimize discrimination not promote it
- Adding quartz wool will increase the surface area of the sample and promote mixing
- Liner should be deactivated especially for analysis of polar solutes and for splitless injections
- Quartz wool should be placed in the optimum position

Liner selection guide

Color	Injection technique	Sample types	Liner geometry	How the Geometry Works
Dark green	Splitless	<ul style="list-style-type: none"> • Trace level analyses • Active compounds 	Taper/gooseneck 	<ul style="list-style-type: none"> • A bottom taper focuses sample onto the head of the column and minimizes sample contact with metal parts of the inlet. • Remember – the addition of quartz wool to your inlet liner promotes mixing of analytes, aids the vaporization of liquid samples, and works as a trap to collect non-volatile residue in the sample (i.e. protects capillary column from 'dirty' samples).
Blue	Split	<ul style="list-style-type: none"> • General purpose • Concentrated samples • Dirty samples 	FocusLiner 	<ul style="list-style-type: none"> • Ensures quartz wool remains in the correct position in the liner. • Excellent reproducibility results from the wiping of the sample from the syringe needle and the prevention of droplet formation. • Minimizes high molecular weight discrimination.
Aqua	Splitless	<ul style="list-style-type: none"> • Trace level analyses • Dirty samples • Wide boiling point range 	Tapered FocusLiner 	<ul style="list-style-type: none"> • Bottom taper focuses sample onto the head of the column and minimizes contact with metal parts of the inlet. • Ensures quartz wool remains in the correct position in the liner. • Excellent reproducibility results from the wiping of the sample from the syringe needle and the prevention of droplet formation.
Orange	Direct	<ul style="list-style-type: none"> • Trace level analyses • Active compounds 	ConnectTite 	<ul style="list-style-type: none"> • ConnectTite liners facilitate maximum transfer of sample to the GC column and inhibit sample degradation due to hot metal components inside the inlet. • Systems equipped with electronic pressure control require a hole in the liner body to maintain system gas flows. • ConnectTite liners that have a hole near the bottom are best suited to analyses where a tailing solvent peak could affect early eluting compounds. ConnectTite liners with a hole at the top of the liner will improve your analysis with aqueous injections or where compounds of interest elute away from the solvent peak.
Purple	Split/splitless	<ul style="list-style-type: none"> • General purpose • Concentrated samples • Dirty samples (only if quartz wool is present) • Gaseous samples (also purge and trap, headspace) 	Straight 	<ul style="list-style-type: none"> • Straight liners facilitate higher split flows. • Narrow bore straight liners facilitate fast GC work. • Small injection volumes of less than 0.5 µL are best used with a narrow bore. • Narrow bore straight liners improve focussing of gaseous samples (purge, trap and headspace).
Yellow	Splitless LVI	<ul style="list-style-type: none"> • Trace level analyses • Low boiling point compounds • Active compounds 	Double taper 	<ul style="list-style-type: none"> • Bottom taper minimizes contact with metal parts of the inlet and focuses sample onto the head of the column. • Top taper aids in minimizing sample flashback.