

Inlet liner reference guide



Handy reference guide to determine which inlet liner geometry is best for your analysis.

Color	Injection technique	Sample types	Liner geometry	How the geometry works
Dark green	Splitless	 Trace level analyses. Active compounds. 	Taper / Gooseneck	 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 tap to collect non-volatile residue in the sample (i.e. protects capillary column from 'dirty' samples.
Blue	Split	General purpose.Concentrated samples.Dirty samples.	FocusLiner®	 Ensure quartz wool remains in the contact position in the liner. Excellent reproducibility results from the wiping of the sample from the syringe needle and the prevention of droplet formation.
Aqua	Splitless	Trace level analyses.Dirty samples.Wide boiling point range.	Tapered FocusLiner®	 Bottom taper focuses sample onto the head of the column and minimizes contact with the 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	 Trace level analyses. Active compounds. 	ConnecTite	 ConnecTite 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. ConnecTite liners that have a hole near the bottom are best suited to analyses where a tailing solvent peak could affect early eluting compounds. ConnecTite liners with a hole at the top of the liner will improve your analysis with aqueous injectors or where compounds of interest elute away from the solvent peak.
Purple	Split Splitless	 General purpose. Concentrated samples. Dirty samples (only if quartz wool is present) Gaseous samples (also Purge and Trap, Headspace). 	Straight	 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	Trace level analyses.Low boiling point compounds.Active compounds.	Double Taper	 Bottom taper minimizes contact with metal parts of the inlet liner and focuses sample onto the head of the column. Top taper aids in minimizing sample flashback.
Gray	PTV LVI	Trace level analyses. Large volume injections.	PTV/LVI	 PTV and LVI liners generally have sintered glass beads or powder to increase the surface area and trap nonvolatile residue. PTV liners use baffles or a wisp of quartz wool to aid in vaporization of samples and retain droplets during low temperature injections. Side hole needles are recommended for these techniques to ensure effective distribution of sample within the liner.