




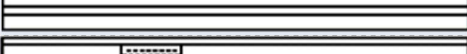


Choosing the correct liner is crucial because it facilitates the transfer of the sample to the GC column. It can significantly influence the accuracy of the analysis. At SCION Instruments, we have various different liner types available;

SCION Instruments liners

- Manufactured with the highest quality glass/quartz wool for minimal degradation, elimination of active sites and optimised volatilization.
- Are designed with specific geometries for applications for sample introduction optimization.
- Ultra inert liners prevent breakdown of active compounds.
- Ultra inert liners optimize peak symmetry in 'hot injections'.

Straight liner

- General purpose analysis
- Can be used with concentrated and dirty samples, if quartz wool is inserted
- Gaseous samples can be analyzed using this liner, also with purge and trap and headspace
- Promotes higher split flows
- Most suitable for packed columns
- Low cost liners
- Low risk of thermal decomposition
- Optional: quartz wool – helps with evaporation, mixing of analytes, trap non-volatile materials and limit discrimination
- Best used for low boiling compounds
- 0.75, 2 or 4 mm ID
- 4 mm ID for larger sample volumes (ideal for splitless injections)

Type	Dimensions	Part nr.	Picture	Comments
Straight	78.5 L x 6.1 OD x 2mm ID	41312103		
Straight	78.5 L x 6.3 OD x 2mm ID	41312105		
Straight	78.5 L x 6.3 OD x 2mm ID	41312108		SPME
SPME Straight	78.5 L x 6.3 OD x 0.75mm ID	41312113		SPME
Straight Qwool	78.5 L x 6.3 OD x 4mm ID	41312100		
Straight Qwool ultra inert	78.5 L x 6.3 OD x 4mm ID	41312114		

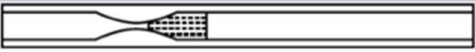
Gooseneck liners

- Good for use in trace level analysis and analysis of active compounds
- Eliminates any dead volume – perfect for packed columns
- Minimize breakdown of active compounds
- Improves efficiency of direct injection
- Regarded as the best split/splitless liner

Gooseneck with wool liners

Additional Benefits:


- Packed with quartz/glass wool
- Minimize discrimination
- Trapping of non-volatile components
- Mixing of analytes
- Risk; overtime wool can become adsorptive

Type	Dimensions	Part nr.	Picture	Comments
Recessed gooseneck quartz wool	78.5 L x 6.3 OD x 4mm ID	41312106		

Recessed Gooseneck



Additional benefits:

- Can be packed with glass wool at the top – trap non-active compounds, mixing of analytes
- Dual column analysis
- Reduced active sites, meaning no unwanted reactions would take place in sample
- Great recovery and linearity for trace analysis of active compounds
- Addition of quartz wool - help in evaporation, trap non-volatile materials (dirty samples) and limit discrimination

Type	Dimensions	Part nr.	Picture	Comments
Recessed gooseneck	78.5 L x 6.3 OD x 2mm ID	41312107		


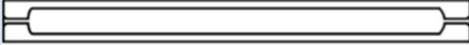


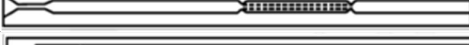



Focus liner

- Keep the quartz wool in place
- Minimize discrimination of high molecular weight compounds
- Improved vaporization of the sample
- Excellent reproducibility
- Prevention of droplet formation
- General purpose
- Concentrated samples
- Dirty samples

Type	Dimensions	Part nr.	Picture	Comments
Focus	78.5 L x 6.3 OD x 4mm ID	41312101		
Focus	78.5 L x 6.3 OD x 2mm ID	41312104		

Tapered (focus) liner

- Trace level analysis
- Dirty samples
- Analysis of wide boiling point range compounds
- Bottom taper – focuses the sample at the entrance of the column
- Keep the quartz wool in place (if the quartz wool is used)
- Excellent reproducibility
- Prevention of droplet formation

Type	Dimensions	Part nr.	Picture	Comments
Taper	78.5 L x 6.3 OD x 4mm ID	41312109		
Double Taper	78.5 L x 6.3 OD x 4mm ID	41312110		
Taper focus	78.5 L x 6.3 OD x 4mm ID	41312102		
Taper focus ultra inert	78.5 L x 6.3 OD 4mm ID	41312115		
Taper fastfocus ultra inert	78.5 L x 6.3 OD x 2.3mm ID	41312116		
Taper quartz wool	78.5 L x 6.3 OD x 4mm ID	41312111		
Taper fastfocus	78.5 L x 6.3 OD x 2.3mm ID	41312112		
Taper quartz wool ultra inert	78.5 L x 6.3 OD x 4mm ID	41312117		

O-rings for liners

SCION injector o-rings provide leak tight seals. It is recommended to replace the o-ring whenever the inlet is untightened (E.g. to check liner condition) They are available in Graphite or Viton depending on the temperature of the injector. For high temperature injectors, use Graphite (max 450°C).

Description	Part nr.
Injector Seal O-Ring 1177 6.5mm ID Viton	41312118
Injector Seal O-Ring 1177 6.5mm ID Graphite	41312119