

CHROMSPEC™ INJECTION PORT LINERS

INJECTION PORT LINERS

- 200 to 300% increase in sample transfer
- Permits use of glass wool for dirty samples
- Readily silanized
- Improved reproducibility
- Easily cleaned

A GC injection port liner serves as an inert environment where a sample can be vaporized prior to introduction onto an analytical column. Liner designs vary according to the type of injection technique used. Being the first part of the sample flow path, it is critical that the liner does not alter the composition of the sample. Liners that are incorrectly deactivated, dirty, broken, or poorly installed can contribute to inferior chromatographic results.

Deactivated Liners

Liner deactivation is critical when analysing active or trace compounds. Undeactivated glass liners expose the sample to metal oxides and silanol groups which can interact with certain pesticides, herbicides, drugs, amines and acids. Total or partial loss of solute (irreversible adsorption) or solute tailing (reversible adsorption) can result from the use of undeactivated liners. Certain pesticides (eg. endrin) are prone to breakdown in undeactivated liners. Deactivation of the glass surface of the liner involves leaching with an acid, followed by silylation with DMDCS (dimethyldichlorosilane) or similar reagent. Care must be taken in cleaning deactivated liners. Methanol, followed by methylene chloride, hexane and the solvent the sample was in, are recommended for cleaning deactivated liners. Brushes that may scratch the surface and strong acids/bases or soaps/surfactants must be avoided. If the deactivation layer has been damaged, the liner will need to be re-deactivated.

Undeactivated Liners

Undeactivated liners can be used successfully for non-active samples such as hydrocarbons. These liners still require frequent cleaning/replacing as dirty samples can quickly contaminate the liner and eventually the column.

Liner Maintenance





Dirty or broken liners can cause poor chromatographic results even for non-active solutes. A contaminated liner can adsorb solutes to varying degrees. A cracked or poorly installed liner will result in poor sample transfer onto the column and consequently poor peak shape. Injection port liners should be changed frequently. The exact schedule of liner replacement will depend on the application, however, it is recommended that the liner be replaced whenever a new column is installed.

TECH TIP

CHROMSPEC™ septa are an affordable alternative to many higher priced OEM products. All are formulated for low bleed and high performance.





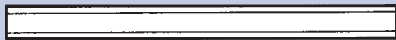
LINERS FOR VARIAN GCs

Replaces OEM

	16-000830-01	
C72100 Fritted Splitter		\$58.40
	N/A	
C72110 Cupped Splitter		86.40
	16-00829-00	
C72120 Baffled Splitter		41.50
	03-949437-00	
C72130 Splitless		41.50

LINERS FOR AGILENT GCs

Replaces OEM

	18740-80190	
C72200 Cupped Splitter (unpacked)		\$44.80
	18740-60840	
C72205 Cupped Splitter (packed)		44.80
	19251-60540	
C72210 Split/Splitless, 1/4" x 4mm (with glass wool)		22.40
	18740-80220	
C72220 Splitless, 1/4" x 2mm		25.70
	19251-60540	
C72215 Split/Splitless, 1/4" x 4mm Disposable, not silanized, Pkg. 10		65.90
C72217 Split/Splitless, 1/4" x 4mm Disposable, not silanized with glass wool plug, Pkg. 10		65.00

Pricing is subject to change without prior notice. For the most current pricing, contact the CSI Customer Service team at

1-800-267-8103 or email sales@chromspec.com