Fused Silica Guard/Retention Gap Columns





also available

Base-deactivated inlet liners See page 213.

did you know?

We test our guard columns/transfer lines with a comprehensive test mix to ensure high inertness.

also available

Metal MXT® Guard Columns

Rugged, flexible, Siltek® treated stainless steel tubing; inertness comparable to fused silica tubing. See **page 114**.

Base-Deactivated Guard/Retention Gap Columns (fused silica)

- · Tested with a basic amine test mix.
- Excellent inertness for basic compounds.
- Recommended for use with Rtx®-5 Amine, Rtx®-35 Amine, Rtx®-Volatile Amine, and Stabilwax®-DB capillary columns.
- · Batch test chromatogram included.
- Maximum temperature: 315 °C.

Chemists using guard columns in the analyses of basic compounds frequently observe peak tailing and low recovery. This happens because conventionally deactivated tubing surfaces can be adsorptive to basic compounds. Restek offers base-deactivated guard columns, as well as base-deactivated inlet liners, for completely inert sample pathways.

Nominal ID	Nominal OD	5-Meter	5-Meter/6-pk.	
0.25mm	0.37 ± 0.04 mm	10000	10000-600	
0.32mm	0.45 ± 0.04 mm	10001	10001-600	
0.53mm	0.69 ± 0.05 mm	10002	10002-600	

Hydroguard® Water-Resistant Guard/Retention Gap Columns/Transfer Lines (fused silica)

- Extend analytical column lifetime by preventing degradation from harsh "steam-cleaning" water injections.
- Tested with a comprehensive test mix, to ensure high inertness.
- Maximum temperature: 325 °C.

When transfer lines from purge & trap systems, air monitoring equipment, or other instruments carry condensed water vapor, deactivated column tubing quickly becomes active because of the creation of free silanol groups. These silanol groups adsorb active oxygenated compounds, such as alcohols and diols.

Restek chemists have addressed this concern and found a solution—the Hydroguard® deactivation process. A unique deactivation chemistry creates a high-density surface that is not readily attacked by aggressive hydrolysis. The high-density surface coverage of the Hydroguard® deactivation layer effectively prevents water vapor from reaching the fused silica surface beneath. Use Hydroguard® tubing for connecting GCs to:

- Headspace analyzers.
- Air analysis equipment and concentrator units.

Nominal ID	Nominal OD	5-Meter	5-Meter/6-pk.	10-Meter	30-Meter*	60-Meter*†
0.05mm	0.363 ± 0.012 mm	10075				
0.10mm	0.363 ± 0.012 mm	10076				
0.15mm	0.363 ± 0.012 mm	10077				
0.18mm	0.37 ± 0.04 mm	10078				
0.25mm	0.37 ± 0.04 mm	10079	10079-600	10082	10085	10088
0.32mm	0.45 ± 0.04 mm	10080	10080-600	10083	10086	10089
0.53mm	0.69 ± 0.05 mm	10081	10081-600	10084	10087	10090

^{*30-} and 60-meter lengths are banded in 5-meter sections.

†Recommendation: Cut 60m guard columns into shorter lengths. Using full length may cause peak distortion.





