

**MXT-5 (Silcosteel)**

(Crossbond 5% diphenyl - 95% dimethyl polysiloxane) Stable to 360°C

ID	df (um)	temp. limits	15-Meter	30-Meter	60-Meter
0.28mm	0.25	-60 to 360°C	70221	70224	70227
	0.50	-60 to 330°C	70236	70239	70242
	1.00	-60 to 325°C	70251	70254	70257
	3.00	-60 to 290°C	70281	70284	70287
0.53mm	0.25	-60 to 360°C	70222	70225	70228
	0.50	-60 to 330°C	70237	70240	70243
	1.00	-60 to 325°C	70252	70255	70258
	1.50	-60 to 300°C	70267	70270	70273
	3.00	-60 to 290°C	70282	70285	70288
	5.00	-60 to 270°C	70277	70279	70283

Restek's  
**MXT<sup>®</sup> columns**  
 rugged, flexible,  
 fused-silica-lined,  
 stainless steel

**Rtx<sup>®</sup>-5MS**

- Polymer batches are tested by mass spec to guarantee low bleed.
- Specially developed to exceed the requirements of the semi-volatile pollutants EPA Methods 625 & 8270.
- Crossbond@ stationary phase results in longer lifetimes, low bleed, and solvent rejuvenation.
- Special test mix emulates the analysis of tough, adsorptive environmental compounds.
- Thermally stable to 360°C.
- Similar to DB-5MS and HP-5MS.

Column bleed can present several problems when analyzing base-neutral and acid extractables with sensitive detectors such as ITD, MS, GCD or even FID. The rise in baseline associated with column bleed can lead to inaccurate quantitative results, misleading spectral interpretation, decreased sensitivity, and, in extreme cases, misidentification.

The synthesis and bonding procedures for the Rtx-5MS were modified from standard 5% phenyl polymers to address specific bleed concerns by mass spectroscopists. Attention was paid to reduce bleed fragments and baseline rise. All residual catalyst, which could cause degradation and increased bleed, is removed from the polymer. The polymer is then carefully fractionated for a tight mono-modal distribution and is fully characterized to ensure reproducibility. Characterization testing includes RI, FTIR, Kovats Indices, % crosslinking, efficiency, and a five-day thermal bake-out to ensure column longevity. New batches of polymers are used only when they meet Restek's stringent QA tests, and each lot is subsequently tracked in an extensive data base for future reference.

Custom lengths and film thicknesses are available. Call your local distributor for more information.

Thorough testing of every Rtx-5MS column guarantees consistent results. Each batch of Rtx-5MS polymer is tested by mass spec and must pass demanding criteria for low bleed and minimal siloxane fragmentation. All Rtx-5MS columns are evaluated with a stringent test mix composed of many of the most adsorptive target compounds. Minimum response factor specifications have been established to ensure that every column exceeds the requirements of the semi-volatile pollutants method. A bleed profile of each column ensures ultra low bleed levels at its maximum operating temperature. Each column is shipped with the actual test chromatogram that demonstrates the Rtx-5MS column's high degree of inertness for stringent environmental compounds. Also included is a test chromatogram showing the polymer bleed profile by a MS detector.

**Rtx-5MS (Fused Silica)**

(Crossbond@ 5% diphenyl - 95% dimethyl polysiloxane) Stable to 360°C

ID	df (um)	temp. limits	15-Meter	30-Meter	60-Meter
0.25mm	0.10	-60 to 330/350°C	12605	12608	12611
	0.25	-60 to 330/350°C	12620	12623	12626
	0.50	-60 to 330/350°C	12635	12638	12641
	1.00	-60 to 325/350°C	12650	12653	
	1.50	-60 to 330/350°C	12667	12670	12673
0.32mm	0.10	-60 to 330/350°C	12606	12609	12612
	0.25	-60 to 330/350°C	12621	12624	12627
	0.50	-60 to 330/350°C	12636	12639	12642
	1.00	-60 to 325/350°C	12651	12654	
0.53mm	0.50	-60 to 320/340°C	12637	12640	
	1.00	-60 to 320/340°C	12652	12655	
	1.50	-60 to 310/3	12667	12670	

**Applications:** semi-volatiles.