

MXT Columns: The Perfect Solution for Portable, Process, and High-Temperature GC Analysis

- Eliminate GC column breakage at high temperatures; stable up to 450 °C.
- Flexible metal tubing allows **custom coil diameters down to 2.5 inches**, giving a perfect fit for even the smallest spaces.
- Exclusive Siltek treatment produces exceptional inertness and more accurate data.



Siltek-treated, stainless-steel MXT wall coated open tubular (WCOT) capillary columns are the best choice for high-temperature chromatography and other situations where the potential for column breakage is too high to rely on fused silica columns. For field instruments, process GCs, GCs with small ovens, etc., Restek MXT columns provide the strength of metal with the inertness of glass and are guaranteed to perform.

Eliminate Column Breakage in Harsh Environments

Fused silica columns are prone to breaking at high temperatures because the polyimide coating becomes brittle with extended exposure to heat (standard rating is 360 °C). In contrast, metal MXT columns do not become brittle or break and can be used with confidence under much more aggressive conditions (up to 450 °C, depending on the stationary phase). While metal surfaces can be a concern when analyzing active compounds, Restek MXT columns are Siltek treated, giving them an inertness similar to deactivated fused silica columns. The combined metal tubing and permeating Siltek treatment allow MXT columns to be coiled into extremely small diameters that are ideal for tight spaces, such as process GCs and field instruments. The standard coil diameter for most MXT columns is 4.5″, but they can be custom coiled to meet your exact specifications (2.5–7″ coil diameters). In addition, we also offer PLOT columns with MXT tubing.

Rugged and inert, Restek's MXT columns are available with a wide variety of polymer phases making them suitable for a broad range of applications. For example, MXT-1HT SimDist columns and MXT-Biodiesel TG columns are widely used in the petroleum/petrochemical industry based on their reliable performance with numerous ASTM methods. Based on their ruggedness and demonstrated performance, MXT columns were also chosen as analytical columns to be carried on the Rosetta spacecraft's Philae lander, which made history for achieving the first soft landing on a comet. In fact, a Restek MXT-1701 column was the first column ever flown in space. Learn more about space chromatography in our exclusive interview with Dr. Robert Sternberg at www.restek.com/Sternberg

Whether your analysis is being done in the field, the refinery, or the farthest reaches of the solar system, our metal MXT columns are the best choice for high-quality, reproducible data. Explore our products and resources and put the power of Restek MXT columns to work for you!



Here's what Robert Sternberg, who was responsible for the space GC team at Laboratoire Interuniversitaire des Systèmes Atmosphériques (LISA) of the University of Paris XII, said about the MXT columns used in the Rosetta mission.

"I would like to mention that all the columns selected for space mission...have all been submitted successfully to space qualification tests such as vibration, radiation and thermal cycles [1], which demonstrated their robustness for space application.

Since the beginning, the Restek company has been more than a manufacturer providing LISA with columns. Indeed, it has been strongly collaborating and helping LISA to develop custom-made columns able to meet the requirements of such an unusual scientific goal for chromatographic columns. That is why LISA is very grateful to Restek for being this ideal partner without the help of which the study and development of chromatographic columns for space use could not have been possible."

1. C. Szopa, U.J. Meierhenrich, D. Coscia, L. Janin, F. Goesmann, R. Sternberg, J.-F. Brun, G. Israel, M. Cabane, R. Roll, F. Raulin, W. Thiemann, C. Vidal-Madjar, H. Rosenbauer, Gas chromatography for in situ analysis of a cometary nucleus IV. Study of capillary column robustness for space application, J. Chromatogr. A, 982 (2002) 303-312.



MXT Columns Are Sized to Order for Your Convenience

Whether you're using them in a process GC or a benchtop GC, Restek MXT columns will be a perfect fit. Our MXT columns come in the standard configurations given on each product web page. However, they can also be ordered in a variety of other configurations.

To order an MXT column in one of the following configurations, use the appropriate suffix from the table below. For example, use catalog number 71811-274 to order an MXT-1 column wound to 2.0" ID without cage. When ordering via www.restek.com, enter the base catalog number in your cart and then add the suffix under Special Instructions. Don't see what you need? Contact Customer Service today at www.restek.com/contact-us

Please note that MXT PLOT columns are only available in the standard 7"-diameter, 11-pin cage configuration and the "-273" configuration.

All OD's provided are estimates and can vary based on the tubing ID and column length.

Catalog Number Suffix	MXT Coiling Description
-274	2.0" ID without cage
-2740	2.0" ID banded with copper wire
-273	2.75" ID/3.5" OD without cage (fits SRI GCs)
-2730	2.75" ID/3.5" OD banded with copper wire (fits SRI GCs)
-2731	2.75" ID/3.5" OD without cage, 18" leads (fits SRI GCs)
-2732	2.75" ID/3.5" OD without cage, 9" leads (fits SRI GCs)
-283	3.5" ID/4.0" OD without cage
-2830	3.5" ID/4.0" OD banded with copper wire
-2831	3.5" ID/4.0" OD without cage, 18" leads (fits SRI GCs)
-272	4.5" ID/5.0" OD without cage
-2720	4.5" ID/5.0" OD banded with copper wire
-6850M	5.0" ID/5.25" OD banded with copper wire
-271	6.0" ID/6.5" OD without cage
-2710	6.0" ID/6.5" OD banded with copper wire
-276	6.0" ID/6.25" OD without cage
-2760	6.0" ID/6.25" OD banded with copper wire
-277	7.0" ID/7.25" OD without cage
-2770	7.0" ID/7.25" OD banded with copper wire
-LUC18	0.18 mm ID MXT Column in Lucidity Column Cartridge (fits Lucidity miniGCs)*
-LUC25	0.25 mm ID MXT Column in Lucidity Column Cartridge (fits Lucidity miniGCs)*
-LUC53	0.53 mm ID MXT Column in Lucidity Column Cartridge (fits Lucidity miniGCs)*

All MXT leads are 36" unless otherwise noted.

*MXT columns for Lucidity miniGCs must be ≤30 m long. Each column comes factory connected in a column cartridge (additional cost will be applied).

Visit **www.restek.com/MXT** for product information, technical literature, and other resources.

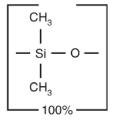


Connect MXT Columns with Confidence

Just like our MXT columns, rugged MXT low-dead-volume connectors are Siltek treated to make them inert to active compounds. They can be used at temperatures up to 430 °C without degrading the deactivated layer, and their low thermal mass tracks rapid oven temperature programming. Kits are available for 0.28 mm, 0.32 mm, and 0.53 mm ID columns in a standard configuration for column-to-column connections and a "Y" configuration for connecting two columns to one inlet or one column to two detectors. Rugged, inert MXT low-dead-volume connectors let you install MXT columns, guard columns, and transfer lines with confidence, ensuring an inert flow path that preserves analyte integrity.







Similar to: (100%-methyl)-polysiloxane

similar phases DB-PS1; UAC-1, UAC-1MS

MXT-1 Columns (Siltek-treated stainless steel)

nonpolar phase; Crossbond dimethyl polysiloxane

- General-purpose columns for solvent impurities, PCB congeners (e.g., Aroclor mixes), gases, natural gas odorants, sulfur compounds, essential oils, hydrocarbons, semivolatiles, pesticides, and oxygenates.
- Equivalent to USP G1, G2, G38 phases.
- 4.5" standard coil diameter.
- Temperature range: -60 to 430 °C
- *Maximum temperature varies by cat.#; see column-specific temperatures.

MXT-1 columns exhibit long lifetime and very low bleed at high operating temperatures. A proprietary synthesis process eliminates residual catalysts that could cause degradation and increase bleed.

ID	df	Length	Temp. Limits	Column Config	Note	qty.	Similar to Part #	cat.#
MXT-1								
	0.20 µm	10 m	-60 to 330/430 °C			ea.		71811
0.18 mm	0.20 µm	20 m	-60 to 330/430 °C			ea.		71812
	0.40 µm	20 m	-60 to 320/400 °C			ea.		71815
	0.10 µm	15 m	-60 to 360/430 °C			ea.		70105
	0.10 µm	30 m	-60 to 330/430 °C			ea.		70116
	0.25 µm	15 m	-60 to 360/430 °C			ea.		70120
	0.25 µm	30 m	-60 to 330/430 °C			ea.		70123
	0.25 μm	60 m	-60 to 340/430 °C			ea.		70126
0.25 mm	0.25 µm	105 m	-60 to 340/430 °C			ea.		70129
0.23 11111	0.50 µm	15 m	-60 to 330/400 °C			ea.		70135
	0.50 µm	30 m	-60 to 330/400 °C			ea.		70138
	1.00 µm	15 m	-60 to 320/360 °C			ea.		70150
	1.00 µm	30 m	-60 to 320/360 °C			ea.		70153
	1.00 µm	60 m	-60 to 320/360 °C			ea.		70156
	1.00 µm	105 m	-60 to 310/360 °C			ea.		70159
	0.10 µm	6 m	-60 to 400/430 °C			ea.		70102
	0.10 µm	15 m	-60 to 360/430 °C			ea.		70106
	0.10 µm	30 m	-60 to 360/430 °C			ea.		70109
	0.25 µm	15 m	-60 to 360/430 °C			ea.		70121
	0.25 µm	30 m	-60 to 360/430 °C			ea.		70124
	0.50 µm	30 m	-60 to 330/400 °C			ea.		70139
	0.50 µm	30 m	-60 to 330/400 °C	3.5" Coil		ea.		70139-273
0.28 mm	0.50 µm	60 m	-60 to 330/400 °C			ea.		70142
	1.00 µm	15 m	-60 to 320/360 °C			ea.		70151
	1.00 µm	30 m	-60 to 320/360 °C			ea.		70154
	1.00 µm	30 m	-60 to 320/360 °C			6-pk.		70154-600
	1.00 µm	60 m	-60 to 320/360 °C			ea.		70157
	3.00 µm	15 m	-60 to 285/360 °C			ea.		70181
	3.00 µm	30 m	-60 to 285/360 °C			ea.		70184
	3.00 µm	60 m	-60 to 285/360 °C			ea.		70187

Continued



MXT-1 Columns (Siltek-treated stainless steel) *Continued*

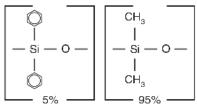
ID	df	Length	Temp. Limits	Column Config	Note	qty.	Similar to Part #	cat.#
	0.15 µm	15 m	-60 to 360/430 °C			ea.		70107
	0.25 µm	15 m	-60 to 360/430 °C			ea.		70122
	0.25 µm	30 m	-60 to 360/430 °C			ea.		70125
	0.25 µm	60 m	-60 to 340/430 °C			ea.		70128
	0.50 μm	15 m	-60 to 330/400 °C			ea.	Agilent 145-1017; Scion/Bruker/Varian CP7125	70137
	0.50 μm	30 m	-60 to 330/400 °C			ea.	Agilent 145-1037; Scion/Bruker/Varian CP7135	70140
	0.50 µm	60 m	-60 to 330/400 °C			ea.		70143
	1.00 µm	15 m	-60 to 320/360 °C			ea.		70152
	1.00 µm	30 m	-60 to 320/360 °C			ea.		70155
	1.00 µm	60 m	-60 to 320/360 °C			ea.		70158
	1.50 µm	15 m	-60 to 310/360 °C			ea.	Agilent 145-1012	70167
0.53 mm	1.50 µm	30 m	-60 to 310/360 °C			ea.	Agilent 145-1032	70170
	1.50 µm	60 m	-60 to 310/360 °C			ea.		70173
	3.00 µm	15 m	-60 to 285/360 °C			ea.		70182
	3.00 µm	30 m	-60 to 285/360 °C			ea.	Agilent 145-1034	70185
	3.00 µm	60 m	-60 to 285/360 °C			ea.		70188
	3.00 µm	105 m	-60 to 285/360 °C			ea.		70189
	5.00 µm	15 m	-60 to 270/360 °C			ea.		70177
	5.00 µm	15 m	-60 to 270/360 °C	3.5" Coil		ea.		70177-273
	5.00 µm	30 m	-60 to 270/360 °C			ea.	Agilent 145-1035	70179
	5.00 µm	30 m	-60 to 270/360 °C	3.5" Coil		ea.		70179-273
	5.00 µm	60 m	-60 to 270/360 °C			ea.		70183
	5.00 µm	60 m	-60 to 270/360 °C	3.5" Coil		ea.		70183-273
	7.00 µm	15 m	-60 to 240/360 °C			ea.		70191
	7.00 µm	30 m	-60 to 250/360 °C			ea.		70192
	7.00 µm	60 m	-60 to 240/360 °C			ea.		70193

ordering notes
Custom lengths and film thicknesses available.
Contact Technical Service or your local Restek representative.

SAVE MONEY! Get six columns for the price of five. Contact Customer Service or your local Restek representative for details!







Similar to: (5%-phenyl)-methylpolysiloxane

similar phases

DB-PS5, VF-5ht UltiMetal; UAC-5, UAC-5MS

MXT-5 Columns (Siltek-treated stainless steel)

low-polarity phase; Crossbond diphenyl dimethyl polysiloxane

- General-purpose columns for drugs, solvent impurities, pesticides, hydrocarbons, PCB congeners (e.g., Aroclor mixes), essential oils, and semivolatiles.
- Equivalent to USP G27, G36 phases.
- 4.5" standard coil diameter.
- Temperature range: -60 to 430 °C*
- *Maximum temperature varies by cat.#; see column-specific temperatures.

The diphenyl dimethyl polysiloxane stationary phase is used in a wide variety of applications. All residual catalysts and low molecular weight fragments are removed from the MXT-5 polymer, providing a tight monomodal distribution and extremely low bleed.

ID	df	Length	Temp. Limits	Column Config	qty.	Similar to Part #	cat.#
	0.20 μm	10 m	-60 to 325/430 °C		ea.		71821
	0.20 μm	20 m	-60 to 325/400 °C		ea.		71822
0.18 mm	0.20 µm	40 m	-60 to 325/430 °C		ea.		71823
	0.40 µm	10 m	-60 to 315/400 °C		ea.		71824
	0.40 µm	20 m	-60 to 315/400 °C		ea.		71825
	0.10 µm	15 m	-60 to 330/430 °C		ea.		70205
	0.10 µm	30 m	-60 to 330/430 °C		ea.		70208
	0.25 μm	15 m	-60 to 360/430 °C		ea.		70220
	0.25 μm	30 m	-60 to 360/430 °C		ea.		70223
0.25 mm	0.25 μm	60 m	-60 to 330/430 °C		ea.		70226
	0.50 µm	15 m	-60 to 330/360 °C		ea.		70235
	0.50 µm	30 m	-60 to 315/400 °C		ea.		70238
	1.00 µm	15 m	-60 to 310/340 °C		ea.		70250
	1.00 µm	30 m	-60 to 310/340 °C		ea.		70253
	0.25 μm	15 m	-60 to 340/430 °C		ea.		70221
	0.25 µm	30 m	-60 to 360/430 °C		ea.		70224
	0.25 μm	60 m	-60 to 340/430 °C		ea.		70227
	0.50 µm	15 m	-60 to 315/400 °C		ea.		70236
0.28 mm	0.50 µm	30 m	-60 to 330/400 °C		ea.		70239
_	1.00 µm	15 m	-60 to 310/360 °C		ea.		70251
	1.00 µm	30 m	-60 to 325/360 °C		ea.		70254
	1.00 µm	60 m	-60 to 325/360 °C		ea.		70257
	3.00 µm	30 m	-60 to 290/360 °C		ea.		70284
	0.25 µm	15 m	-60 to 340/430 °C		ea.		70222
	0.25 µm	30 m	-60 to 340/430 °C		ea.		70225
	0.25 µm	60 m	-60 to 340/430 °C		ea.		70228
	0.50 µm	15 m	-60 to 330/400 °C		ea.		70237
	0.50 µm	30 m	-60 to 330/400 °C		ea.		70240
	1.00 µm	15 m	-60 to 310/360 °C		ea.		70252
	1.00 µm	15 m	-60 to 310/360 °C	3.5" Coil	ea.		70252-27
	1.00 µm	30 m	-60 to 325/360 °C		ea.		70255
0.50	1.00 µm	30 m	-60 to 325/360 °C	3.5" Coil	ea.		70255-27
0.53 mm	1.00 µm	60 m	-60 to 310/360 °C		ea.		70258
	1.50 µm	15 m	-60 to 300/360 °C		ea.		70267
	1.50 µm	30 m	-60 to 300/360 °C		ea.	Agilent 145-5032	70270
	3.00 µm	15 m	-60 to 290/360 °C		ea.	·	70282
	3.00 µm	30 m	-60 to 290/360 °C		ea.		70285
	3.00 µm	60 m	-60 to 290/360 °C		ea.		70288
	5.00 μm	15 m	-60 to 270/360 °C		ea.		70277
	5.00 μm	30 m	-60 to 270/360 °C		ea.		70279
	5.00 µm	60 m	-60 to 270/360 °C		ea.		70283



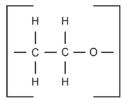
MXT-WAX Columns (Siltek-treated stainless steel)

polar phase; Crossbond Carbowax polyethylene glycol

- General-purpose MXT-WAX columns for FAMEs, flavor compounds, essential oils, amines, solvents, xylene isomers, and U.S. EPA Method 603 (acrolein/acrylonitrile).
- Equivalent to USP G14, G15, G16, G20, and G39 phases.
- 4.5" standard coil diameter.
- Temperature range: 40 to 260 °C*
- *Maximum temperature varies by cat.#; see column-specific temperatures.

ID	df	Length	Temp. Limits	Column Config	qty.	Similar to Part #	cat.#
	0.25 μm	15 m	40 to 250/260 °C		ea.		70620
0.25 mm	0.25 μm	30 m	40 to 240/260 °C		ea.		70623
	0.50 µm	30 m	40 to 250/260 °C		ea.		70638
	0.25 μm	30 m	40 to 250/260 °C		ea.		70624
0.28 mm	0.50 µm	30 m	40 to 250/260 °C		ea.		70639
	0.50 µm	60 m	40 to 250/260 °C		ea.		70642
	1.00 µm	15 m	40 to 240/250 °C		ea.		70651
	1.00 µm	30 m	40 to 240/250 °C		ea.		70654
	1.00 µm	60 m	40 to 240/250 °C		ea.		70657
	0.25 μm	15 m	40 to 250/260 °C		ea.		70622
	0.25 μm	30 m	40 to 250/260 °C		ea.		70625
	0.25 µm	30 m	40 to 250/260 °C	3.5" Coil	ea.		70625-273
	0.50 µm	15 m	40 to 250/260 °C		ea.		70637
	0.50 µm	30 m	40 to 250/260 °C		ea.		70640
	1.00 µm	15 m	40 to 240/250 °C		ea.	Agilent 145-7012; Scion/Bruker/ Varian CP7148	70652
0.53 mm	1.00 µm	30 m	40 to 240/250 °C		ea.	Agilent 145-7032; Scion/Bruker/ Varian CP7158	70655
	1.00 µm	30 m	40 to 240/250 °C	3.5" Coil	ea.		70655-273
	1.00 µm	60 m	40 to 240/250 °C		ea.		70658
	1.50 µm	15 m	40 to 230/250 °C		ea.		70666
	1.50 µm	30 m	40 to 230/250 °C		ea.		70669
	1.50 µm	60 m	40 to 230/250 °C		ea.		70672
	2.00 µm	15 m	40 to 220/260 °C		ea.		70667
	2.00 µm	30 m	40 to 220/250 °C		ea.		70670





similar phases DB-PSWAX; UAC-CW

MXT-1HT SimDist Column (Siltek-treated stainless steel)

nonpolar phase

- Lowest bleed for longest column lifetime.
- Reliably meets all ASTM D2887, D6352, D7169, D7213, and D7500 requirements.
- Individually tested for guaranteed performance.
- Temperature range: -60 to 450 °C*

Accurate boiling point determination for medium and heavy fractions using GC simulated distillation requires columns and phase polymers that are robust enough to withstand high temperatures without significant degradation. Restek's MXT-1HT SimDist column meets those requirements.

ID	df	Length	Temp. Limits	qty.	Similar to Part #	cat.#
	0.10 µm	5 m	-60 to 430/450 °C	ea.	Agilent CP7569	70112
	0.20 µm	5 m	-60 to 430 °C	ea.		70115
	0.21 µm	10 m	-60 to 430 °C	ea.		70118
	0.88 µm	5 m	-60 to 400/430 °C	ea.		70131
0.53 mm	0.88 µm	10 m	-60 to 400/430 °C	ea.		70134
	1.00 µm	10 m	-60 to 380/400 °C	ea.		70130
	1.20 µm	10 m	-60 to 380/380 °C	ea.		70119
	2.65 µm	10 m	-60 to 380/400 °C	ea.		70132
	5.00 µm	10 m	-60 to 380/400 °C	ea.		70133



similar phases
CP-SimDist UltiMetal, DB-HT SimDis ProSteel;
ZB-1X SimDist



^{*}Maximum temperature varies by cat.#; see column-specific temperatures.



similar phases
DB-PS2887

MXT-2887 Column (Siltek-treated stainless steel)

nonpolar phase; Crossbond 100% dimethyl polysiloxane—for simulated distillation

- Application-specific columns for simulated distillation.
- 4.5" standard coil diameter.
- Temperature range: -60 to 400 °C

MXT-2887 columns' stationary phase, column dimensions, and film thicknesses have been optimized to exceed the resolution and skewing factor requirements specified in ASTM Method D2887. Each column is individually tested to guarantee a stable baseline with low bleed and reproducible retention times. The Crossbond methyl silicone stationary phase has increased stability compared to packed columns, ensuring stable baselines and shorter conditioning times. Manufactured from Siltek-treated, stainless-steel tubing, MXT columns are the most durable high-temperature GC columns available.

ID	df	Length	Temp. Limits	qty.	Similar to Part #	cat.#
0.53 mm	2.65 µm	10 m	-60 to 360/400 °C	ea.	Agilent 145-2814	70199



similar phases MET-Biodiesel

MXT-Biodiesel TG Columns (Siltek-treated stainless steel)

- Fast analysis times and sharp mono-, di-, and triglyceride peaks.
- Temperature range: -60 to 430 °C

ID	df	Length	Temp. Limits	Modification	Column Config	qty.	cat.#
0.52	0.16 µm	14 m	-60 to 380/430 °C	with 2 m Integra-Gap (Total column length = 16 meters.)	7" 11-pin cage	ea.	70289
0.53 mm	0.16 µm	14 m	-60 to 380/430 °C	with 2 m Integra-Gap (Total column length = 16 meters.)	3.5" Coil	ea.	70289-273
	0.10 µm	10 m	-60 to 380/430 °C		7" 11-pin cage	ea.	70292
0.32 mm	0.10 μm	10 m	-60 to 380/430 °C	with 2 m x 0.53 mm ID Retention Gap (Connected with low-dead-volume MXT connector.)	7" 11-pin cage	ea.	70290
0.32 11111	0.10 µm	15 m	-60 to 380/430 °C		7" 11-pin cage	ea.	70293
	0.10 μm	15 m	-60 to 380/430 °C	with 2 m x 0.53 mm ID Retention Gap (Connected with low-dead-volume MXT connector.)	7" 11-pin cage	ea.	70291
0.53 mm		2 m	-60 to 380/430 °C	Retention Gap	7" 11-pin cage	ea.	70294



MXT-624 Columns (Siltek-treated stainless steel)

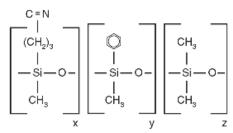
low- to midpolarity phase

- Application-specific columns for volatile organic pollutants. Recommended in U.S. EPA methods for volatile organic pollutants.
- Equivalent to USP G43 phase.
- 4.5" standard coil diameter.
- Temperature range: -20 to 280 °C

The unique polarity of "624" columns makes them ideal for analyses of volatile organic pollutants. Although the MXT-502.2 column is recommended in many methods, MXT-624 columns offer the best separation of the early-eluting gases.

ID	df	Length	Temp. Limits	qty.	Similar to Part #	cat.#
0.25	1.40 µm	30 m	-20 to 240/280 °C	ea.		70968
0.25 mm	1.40 µm	60 m	-20 to 240/280 °C	ea.		70969
0.52	3.00 µm	30 m	-20 to 240/280 °C	ea.	Agilent 145-1334	70971
0.53 mm	3.00 µm	60 m	-20 to 240/280 °C	ea.		70973





Similar to: (6%-cyanopropylphenyl)-methylpolysiloxane

similar phases

DB-PS624; UAC-624

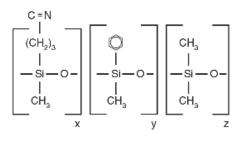
MXT-1701 Columns (Siltek-treated stainless steel)

midpolarity Crossbond phase

- General-purpose columns for alcohols, oxygenates, PCB congeners (e.g., Aroclor mixes), and pesticides.
- Equivalent to USP G46 phase.
- 4.5" standard coil diameter.
- \bullet Temperature range: -20 to 280 $^{\circ}\text{C}^{*}$
- *Maximum temperature varies by cat.#; see column-specific temperatures.

ID	df	Length	Temp. Limits	qty.	cat.#
0.2F	0.25 μm	30 m	-20 to 280 °C	ea.	72023
0.25 mm	1.00 µm	30 m	-20 to 260 °C	ea.	72053
	0.50 µm	30 m	-20 to 270/280 °C	ea.	72040
	1.00 µm	15 m	-20 to 260 °C	ea.	72052
	1.00 µm	30 m	-20 to 260 °C	ea.	72055
0.53 mm	1.50 µm	30 m	-20 to 250 °C	ea.	72070
	3.00 µm	15 m	-20 to 240 °C	ea.	72082
	3.00 µm	30 m	-20 to 240 °C	ea.	72085
	3.00 µm	60 m	-20 to 220/240 °C	ea.	72088

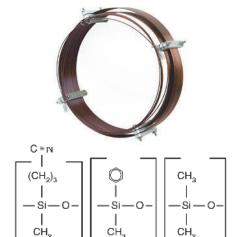




similar phases

DB-PS1701





Similar to: (6%-cyanopropylphenyl)-methylpolysiloxane

MXT-1301 Columns (Siltek-treated stainless steel)

low- to midpolarity phase

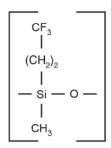
- General-purpose columns for residual solvents, alcohols, oxygenates, and volatile organic compounds.
- Equivalent to USP G43 phase.
- 4.5" standard coil diameter.
- Temperature range: -20 to 280 °C

ID	df	Length	Temp. Limits	qty.	cat.#
	3.00 µm	15 m	-20 to 240/280 °C	ea.	76082
0.53 mm	3.00 µm	30 m	-20 to 240/280 °C	ea.	76085
	3.00 µm	60 m	-20 to 240/280 °C	ea.	76088

similar phases

DB-PS1301





Similar to: (trifluoropropyl)-methylpolysiloxane

Separations similar to DB-200 columns.

MXT-200 Columns (Siltek-treated stainless steel) midpolarity phase; Crossbond trifluoropropylmethyl polysiloxane

 General-purpose columns for solvents, Freon fluorocarbons, alcohols, ketones, silanes, and glycols. Excellent confirmation column with an Rtx-5 column, for phenols, nitrosamines, organochlorine pesticides, chlorinated hydrocarbons, and chlorophenoxy herbicides.

- Equivalent to USP G6 phase.
- 4.5" standard coil diameter.
- Temperature range: -20 to 400 °C*
- *Maximum temperature varies by cat.#; see column-specific temperatures.

ID	df	Length	Temp. Limits	qty.	cat.#
0.25	0.50 µm	30 m	-20 to 330/400 °C	ea.	75038
0.25 mm —	1.00 µm	30 m	-20 to 290/360 °C	ea.	75053
	1.00 µm	15 m	-20 to 290/360 °C	ea.	75052
	1.00 µm	30 m	-20 to 290/360 °C	ea.	75055
	1.00 µm	60 m	-20 to 290/360 °C	ea.	75058
0.52	1.50 µm	30 m	-20 to 280/360 °C	ea.	75070
0.53 mm	1.50 µm	60 m	-20 to 260/360 °C	ea.	75073
	3.00 µm	15 m	-20 to 260/360 °C	ea.	75082
	3.00 µm	30 m	-20 to 270/360 °C	ea.	75085
	3.00 µm	60 m	-20 to 260/360 °C	ea.	75088



MXT-502.2 Columns (Siltek-treated stainless steel)

proprietary Crossbond diphenyl/dimethyl polysiloxane phase

- Application-specific columns with unique selectivity for volatile organic pollutants, cited in U.S. EPA Method 502.2 and in many gasoline range organics (GRO) methods for monitoring underground storage tanks. Excellent separation of trihalomethanes; ideal polarity for light hydrocarbons and aromatics.
- 4.5" standard coil diameter.
- Temperature range: -20 to 320 °C

An MXT-502.2 column will enable you to quantify all compounds listed in U.S. EPA Methods 502.2 or 524.2, whether you use a mass spectrometer or a PID in tandem with an ELCD. The diphenyl/dimethyl polysiloxane based MXT-502.2 stationary phase provides low bleed and thermal stability to 320 $^{\circ}$ C. A 105-meter column can separate the light gases specified in EPA methods without subambient cooling.

ID	df	Length	Temp. Limits	qty.	cat.#
0.28 mm	1.60 µm	30 m	-20 to 250/320 °C	ea.	70919
0.53 mm —	3.00 µm	30 m	-20 to 250/320 °C	ea.	70908
	3.00 µm	105 m	-20 to 250/320 °C	ea.	70910



similar phases
DB-PS502.2

MXT-Volatiles Columns (Siltek-treated stainless steel) proprietary Crossbond diphenyl/dimethyl polysiloxane phase

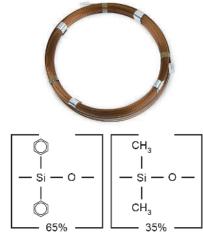
- Application-specific columns for volatile organic pollutants.
- 4.5" standard coil diameter.
- Temperature range: -20 to 320 °C

MXT-Volatiles columns were the first columns designed specifically for analyses of the 34 volatile organic pollutants listed in U.S. EPA Methods 601, 602, and 624. With these columns, you can quantify all compounds listed in these methods, whether you use a mass spectrometer or a PID in tandem with an ELCD. The diphenyl/dimethyl polysiloxane based MXT-Volatiles stationary phase provides low bleed and thermal stability to 320 °C.

ID	df	Length	Temp. Limits	qty.	cat.#
0.28 mm	1.25 µm	30 m	-20 to 280/320 °C	ea.	70924
	1.25 µm	60 m	-20 to 280/320 °C	ea.	70926
0.53 mm	2.00 µm	30 m	-20 to 280/320 °C	ea.	70925
	2.00 µm	60 m	-20 to 280/320 °C	ea.	70927







Similar to: (65%-phenyl)-methylpolysiloxane

MXT-65TG Columns (Siltek-treated stainless steel)

high-polarity phase; Crossbond diphenyl dimethyl polysiloxane

- Application-specific columns, specially tested for triglycerides.
- 4.5" standard coil diameter.
- \bullet Temperature range: 20 to 370 °C

The MXT-65TG phase resolves triglycerides by degree of unsaturation as well as by carbon number.

ID	df	Length	Temp. Limits	qty.	cat.#
0.25 mm	0.10 μm	15 m	20 to 370 °C	ea.	77005
	0.10 um	30 m	20 to 370 °C	ea	77008

similar phases

UAC-65HT



 $Similar\ to: (50\%-phenyl)-methyl polysilox ane$

MXT-50 Columns (Siltek-treated stainless steel)

midpolarity phase; Crossbond phenyl methyl polysiloxane

- General-purpose columns for pesticides, herbicides, rosin acids, phthalate esters, and sterols.
- Equivalent to USP G3 phase.
- 4.5" standard coil diameter.
- Temperature range: 0 to 300 °C*
- *Maximum temperature varies by cat.#; see column-specific temperatures.

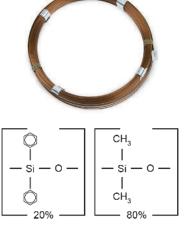
ID	df	Length	Temp. Limits	qty.	cat.#
	0.83 µm	30 m	0 to 280/300 °C	ea.	70569
0.53 mm	1.00 µm	15 m	0 to 260/280 °C	ea.	70552
	1.00 um	30 m	0 to 260/280 °C	ea.	70555

MXT-20 Columns (Siltek-treated stainless steel)

low- to midpolarity phase; Crossbond diphenyl dimethyl polysiloxane

- General-purpose columns for volatile compounds, flavor compounds, and alcoholic beverages.
- Equivalent to USP G28, G32 phases.
- \bullet Temperature range: -20 to 340 $^{\circ}\text{C}$

ID	df	Length	Temp. Limits	qty.	cat.#
0.25 mm	0.25 μm	15 m	-20 to 300/340 °C	ea.	70320



Similar to: (20%-phenyl)-methylpolysiloxane

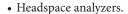


MXT GC Metal Guard Column, Hydroguard (passivated stainless steel)

- Extend analytical column lifetime by preventing degradation from harsh "steam-cleaning" water injections.
- Maximum temperature: 325 °C.

When transfer lines from purge-and-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—Hydroguard deactivated tubing. 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 surface beneath. Use Hydroguard tubing for connecting GCs to these devices:



• Air analysis equipment and concentrator units.

• Purge-and-trap systems.

ID	Length	OD	qty.	cat.#
0.53 mm	5 m	0.74 ± 0.025 mm	ea.	70081
	10 m	0.74 ± 0.025 mm	ea.	70084
	30 m*	0.74 ± 0.025 mm	ea.	70087

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

Diameters greater than 0.10 mm are tested with the Grob test mix to ensure high inertness.

MXT GC Metal Guard Column (passivated stainless steel)

- Useful for a wide range of applications.
- Compatible with most common solvents.
- Maximum temperature: 325 °C.

ID	Length	OD	qty.	cat.#
	5 m	0.56 ± 0.025 mm	ea.	70044
0.28 mm	5 m	0.56 ± 0.025 mm	6-pk.	70044-600
	10 m	0.56 ± 0.025 mm	ea.	70046
	5 m	0.74 ± 0.025 mm	ea.	70045
0.53 mm	5 m	0.74 ± 0.025 mm	6-pk.	70045-600
_	10 m	0.74 ± 0.025 mm	ea.	70047

ordering notes Certificates of analysis for

Certificates of analysis for new 5 m and 10 m Restek guard columns are now provided electronically. To view and download your 5 m or 10 m guard column certificate, simply visit www.restek. com/documentation then enter your catalog # and serial #.

MXT Siltek-Treated GC Metal Guard Column (passivated stainless steel)

- Ideal for high-temperature applications.
- Compatible with most common solvents.
- Not recommended for strong acids and bases.
- Temperature Range: -60° C to 450° C

ID	Length	qty.	cat.#
	5 m	ea.	70026
0.20	10 m	ea.	70036
0.28 mm	15 m	ea.	70056
	30 m	ea.	70066
	5 m	ea.	70028
0.53	10 m	ea.	70038
0.53 mm	15 m	ea.	70058
	30 m	ea.	70068







20396

MXT Low-Dead-Volume "Y" Connector Kits for Metal Columns

Connect two MXT columns to one inlet or one MXT column to two detectors.

Each kit contains the MXT union, three 1/32-inch ferrules and nuts.

Description	Includes	Fits Column ID	qty.	cat.#
	MXT union, 1/32-inch ferrules (3) and nuts (3)	For 0.28 mm ID MXT Columns	kit	20396
MXT Low-Dead-Volume "Y" Connector Kit	MXT union, 1/32-inch ferrules (3) and nuts (3)	For 0.18/0.25/0.32 mm ID MXT Columns	kit	20537
Connector Kit	MXT union, 1/32-inch ferrules (3) and nuts (3)	For 0.53 mm ID MXT Columns	kit	20395

20394

MXT Low-Dead-Volume Connector Kits for Metal Columns

- Connect a guard column/transfer line to an MXT stainless-steel column.
- Low thermal mass tracks rapid oven temperature programming.
- Stainless-steel ferrules and nuts.
- Siltek treatment ensures ultimate inertness.

Each kit contains the MXT union, two 1/32-inch ferrules and nuts.

Description	Includes	Fits Column ID	Union Bore	qty.	cat.#
	MXT union, 1/32-inch ferrules (2) and nuts (2)	For 0.28 mm ID MXT Columns	0.25 mm	kit	20397
MXT Low-Dead-Volume Connector Kit	MXT union, 1/32-inch ferrules (2) and nuts (2)	For 0.18/0.25/0.32 mm ID MXT Columns	0.25 mm	kit	20536
	MXT union, 1/32-inch ferrules (2) and nuts (2)	For 0.53 mm ID MXT Columns	0.25 mm	kit	20394



20398

Replacement Ferrules for MXT Connectors (1/32-Inch Stainless Steel)

Description	Ferrule ID	Fits Column ID	Fitting Size	Material	qty.	cat.#
- 1	0.53 mm	0.18/0.25/0.32 mm	1/32"	Stainless Steel	10-pk.	20535
Replacement Ferrules for MXT Connectors	0.59 mm	0.28 mm	1/32"	Stainless Steel	10-pk.	20398
COMMECTORS	0.79 mm	0.53 mm	1/32"	Stainless Steel	10-pk.	20399



Restek Electronic Leak Detector

New and improved! Prevent small leaks from causing big problems with a Restek leak detector.

- Detects a broad range of gases and indicates leak severity with both an LED display and audible tone.
- No more waiting for a full charge—can be operated during charging or used up to 12 hours between charges.
- Charging kit includes both universal AC power adaptor and USB charging cable so you can charge anywhere, anytime.
- Pinpoint very small gas leaks quickly and accurately before they cause damage and downtime.
- Compact, handheld unit is easy to operate and convenient to use anywhere you need to check for leaks.

Features & benefits include:

- Detects a broad range of gases.
- Audible tone and LED display indicate the severity of a leak.
- Can be operated during charging or used up to 12 hours between charges.
- Ergonomic, handheld design.
- Rugged side grips for added durability.
- Handy probe storage for cleanliness and convenience.
- Automatic shutoff.
- A convenient carrying and storage case.
- Easy-to-clean probe assembly.
- A universal AC power adaptor (U.S., UK, Europe, Australia, Japan).
- USB charging cable.

Backed by a one-year warranty, the Restek leak detector is the industry standard for performance and affordability in handheld leak detectors.

Leak Detector Specifications

Detectable Gases: Helium, nitrogen, argon, carbon dioxide, hydrogen*

Battery: Rechargeable nickel-metal hydride (NiMH) internal battery pack (12 hours normal operation)

Ambient Temperature: 50-98.6 °F (10-37 °C)

Humidity Range: 0-97%

Warranty: One year

Certification/Compliance: CE (EU, Korea, Japan, Australia); CSA/UL tested, not listed; WEEE; CEC; China RoHS 2; UKCA Indoor Use Only

Limits of Detection

These gases can be detected with the Restek electronic leak detector at the following leak rates:

Minimum Detectable Gas Limits and Indicating LED Color:

Helium, 1.0 x 10⁻⁵, red LED Hydrogen*, 1.0 x 10⁻⁵, red LED

Nitrogen, 1.4 x 10⁻³, yellow LED

Argon, 1.0 x 10⁻⁴, yellow LED Carbon dioxide, 1.0 x 10⁻⁴, yellow LED

Gas detection limits measured in atm cc/sec.

Description	Includes	qty.	cat.#
Restek Electronic Leak	carrying case, universal AC power adaptor [U.S., UK, Europe, Australia, Japan],	ea.	28500
Detector	6-ft USB charging cable	ea.	20300

Avoid using liquid leak detectors on a GC! Liquids can be drawn into the system and/or into the leak detector.

*Caution: The Restek electronic leak detector should only be used to detect trace amounts of hydrogen in a noncombustible environment. It is NOT designed for determining leaks in a combustible environment. A combustible gas detector should be used for determining combustible gas leaks under any condition. When using it to detect hydrogen, the Restek electronic leak detector may only be used for determining trace amounts in a GC environment.



28500







Restek patents and trademarks are the property of Restek Corporation. (See www.restek.com/Patents-Trademarks for full list.) Other trademarks in Restek literature or on its website are the property of their respective owners. Restek registered trademarks are registered in the U.S. and may also be registered in other countries. To unsubscribe from future Restek communications or to update your preferences, visit www.restek.com/subscribe To update your status with an authorized Restek distributor or instrument channel partner, please contact them directly.

www.restek.com

