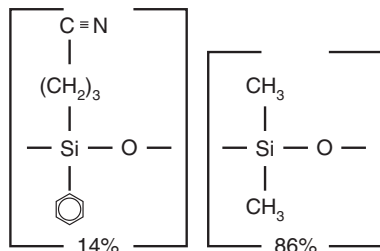


## Rtx®-1701 Structure

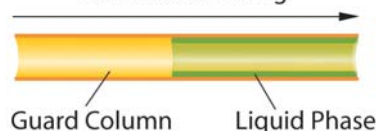


## similar phases

DB-1701, HP-1701, SPB-1701, VF-1701,  
CP-Sil 19 CB

## Integra-Guard® built-in guard column

Continuous Tubing



## Get the protection without the connection!

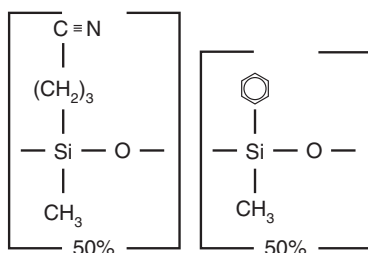
For Rtx®-1701 columns with built-in  
Integra-Guard® guard columns,  
see page 35.

## also available

## Metal MXT® Columns

Rugged, flexible, Siltek® treated stainless steel  
tubing; inertness comparable to fused silica  
tubing. See page 118 for our MXT®-1701  
columns.

## Rtx®-225 Structure



## similar phases

DB-225, HP-225, SPB-225, CP-Sil 43 CB

## Rtx®-1701 Columns (fused silica)

(midpolarity phase; Crossbond® 14% cyanopropylphenyl/86% dimethyl polysiloxane)

- General purpose columns for alcohols, oxygenates, PCB congeners (e.g. Aroclor mixes), pesticides.
- Temperature range: -20 °C to 280 °C.
- Equivalent to USP G46 phase.

Rtx®-1701 is one of the more popular stationary phases used in capillary GC. The mix of cyano and phenyl functional groups increases the polarity and offers a different elution order relative to less polar Rtx®-1 or Rtx®-5 columns. An Rtx®-1701 column is ideal for confirmation analysis, in combination with an Rtx®-35 or Rtx®-5 column. The polymer is fully characterized to ensure long-term reproducibility, column-to-column consistency, and low bleed, even with sensitive detectors such as ECDs and MSDs.

ID	df	temp. limits*	15-Meter	30-Meter	60-Meter
0.25mm	0.10µm	-20 to 280°C			12011
	0.25µm	-20 to 280°C	12020	12023	12026
	0.50µm	-20 to 270/280°C	12035	12038	12041
	1.00µm	-20 to 260/280°C	12050	12053	12056
0.32mm	0.10µm	-20 to 280°C		12009	
	0.25µm	-20 to 280°C	12021	12024	12027
	0.50µm	-20 to 270/280°C	12036	12039	12042
	1.00µm	-20 to 260/280°C	12051	12054	12057
	1.50µm	-20 to 240/260°C	12066	12069	12072
0.53mm	0.10µm	-20 to 270/280°C	12007		
	0.25µm	-20 to 270/280°C	12022	12025	12028
	0.50µm	-20 to 260/270°C	12037	12040	12043
	1.00µm	-20 to 250/270°C	12052	12055	12058
	1.50µm	-20 to 240/260°C	12067	12070	12073
	3.00µm	-20 to 230/250°C	12082	12085	12088

ID	df	temp. limits	10-Meter	20-Meter
0.10mm	0.10µm	-20 to 280°C	42201	42202
0.18mm	0.20µm	-20 to 280°C	42001	42002
	0.40µm	-20 to 270/280°C	42010	42011

## Rtx®-225 Columns (fused silica)

(polar phase; Crossbond® 50% cyanopropylmethyl/50% phenylmethyl polysiloxane)

- General purpose columns for FAMES, carbohydrates, sterols, flavor compounds.
- Temperature range: 40 °C to 240 °C.
- Equivalent to USP G7, G19 phases.

The cyanopropyl-containing Rtx®-225 phase is slightly less polar than bonded polyethylene glycol (PEG) phases, but it can be used for many of the same applications.

Improvements to the Rtx®-225 polymer have increased thermal stability, reduced bleed, and improved inertness. The Rtx®-225 column provides a 20°C thermal stability advantage over other “225” columns because of our unique polymer synthesis technology and proprietary siloxane deactivation. In most similar columns, the Carbowax® deactivation layer is not fully compatible with the cyanopropyl siloxane polymer, which can cause adsorption, tailing of active compounds, and lower efficiency.

ID	df	temp. limits*	15-Meter	30-Meter	60-Meter
0.25mm	0.10µm	40 to 220/240°C	14005	14008	
	0.25µm	40 to 220/240°C	14020	14023	14026
	0.50µm	40 to 220/240°C	14035	14038	14041
0.32mm	0.10µm	40 to 220/240°C	14006	14009	
	0.25µm	40 to 220/240°C	14021	14024	14027
	0.50µm	40 to 220/240°C	14036	14039	14042
	1.00µm	40 to 200/220°C	14051	14054	14057
0.53mm	0.10µm	40 to 200/220°C	14007	14010	
	0.25µm	40 to 200/220°C	14022	14025	
	0.50µm	40 to 200/220°C	14037	14040	14043
	1.00µm	40 to 200/220°C	14052	14055	14058

\*Maximum temperatures listed are for 15- and 30-meter lengths. Longer lengths may have a slightly reduced maximum temperature.