

Porous Polymers: Rt™-QPLOT, Rt™-QSPLIT, Rt™-SPLOT, and Rt™-UPLOT Columns

Restek has developed unique polymer technology and coating processes, to make excellent porous polymer PLOT columns. Selectivity is similar to that of Porapak and HayeSep® packings. Unlike molecular sieve and alumina columns, porous polymer PLOT columns are not moisture sensitive, making them particularly useful for applications in which moisture is of major concern.

Chromatographic selectivity, in terms of polarity or chemical functionality, can be modified by incorporating polar functional groups in the styrene/divinylbenzene matrix. The least polar, or nonpolar, Rt™-QPLOT columns are made with divinylbenzene. Rt™-SPLOT columns incorporate 4-vinylpyridine, providing intermediate polarity. The new Rt™-QSPLIT column has been engineered to have a polarity between the Rt™-QPLOT and Rt™-SPLOT columns. The Rt™-QSPLIT column fully resolves ethylene, acetylene, and ethane. Highly-polar Rt™-UPLOT columns are modified with an ethylene glycol/dimethylacrylate functional group to provide excellent selectivity for unsaturated compounds.

Use these porous PLOT columns for a wide variety of separations. Permanent gases can be separated at subambient temperatures. Inorganic gases such as CO₂ can be easily analyzed on porous polymer columns. For hydrocarbon analysis, tremendous versatility based on a choice of selectivity is advantageous. These columns also are designed for analysis of various polar and nonpolar solvents.

Rt™-QPLOT Columns (fused silica PLOT)

100% divinylbenzene

ID	df (μm)	temp. limits	15-Meter	30-Meter
0.32mm	10	to 250°C	19717	19718
0.53mm	20	to 250°C	19715	19716

Rt™-QSPLIT Columns (fused silica PLOT)

porous divinyl benzene homopolymer

ID	df (μm)	temp. limits	15-Meter	30-Meter
0.32mm	10	-60 to 270/290°C	19739	19740
0.53mm	20	-60 to 270/290°C	19737	19738

Rt™-SPLOT Columns (fused silica PLOT)

divinylbenzene 4-vinylpyridine

ID	df (μm)	temp. limits	15-Meter	30-Meter
0.32mm	10	to 250°C	19711	19710
0.53mm	20	to 250°C	19713	19712

Rt™-UPLOT Columns (fused silica PLOT)

divinylbenzene ethylene glycol/dimethylacrylate

ID	df (μm)	temp. limits	15-Meter	30-Meter
0.32mm	10	to 190°C	19725	19724
0.53mm	20	to 190°C	19727	19726

did you know?

New purification techniques have improved the peak shapes for polar compounds on our Rt™-QPLOT columns.

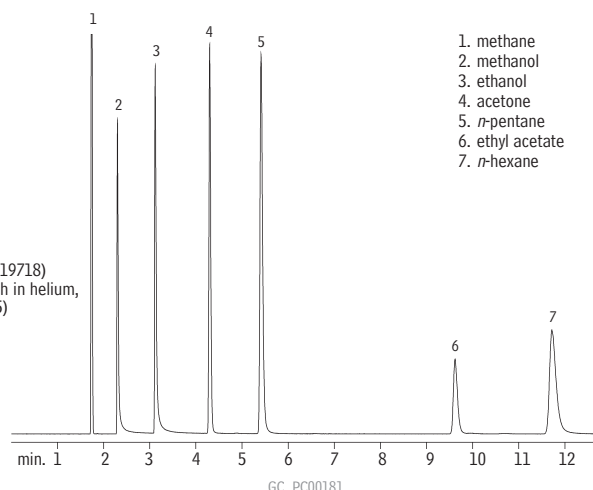
new!

Intermediate polarity porous polymer Rt™-QSPLIT Columns—100% resolution of ethylene, acetylene, and ethane.

please note

Our porous polymer PLOT columns are not moisture sensitive, making them ideal for applications in which moisture is of major concern.

Solvents on the nonpolar Rt™-QPLOT column.



Column: Rt™-QPLOT, 30m, 0.32mm ID (cat.# 19718)
 Inj.: 20μL split injection, 50ppm (w/v) each in helium, Cyclosplitter® inlet liner (cat.# 20755)
 Oven temp.: 150°C
 Inj./det. temp.: 200°C
 Carrier gas: hydrogen
 Det.: FID
 Split ratio: 20/1

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