



Aromatics & Oxygenates in Gasoline Analysis

Rt®-TCEP Columns (fused silica)

(highly polar phase; 1,2,3-tris[2-cyanoethoxy]propane—not bonded)

- General purpose columns, ideal for aromatics and oxygenates in gasoline.
- Temperature range: 0 °C to 135 °C.

Most gasolines contain aliphatic hydrocarbons up to *n*-dodecane (C12). To improve identification of the aromatics and oxygenates, it is desirable to elute benzene after C11 and toluene after C12. The extremely polar Rt®-TCEP stationary phase provides a retention index for benzene greater than 1100 and permits the separation of alcohols and aromatics from the aliphatic constituents in gasoline.

Rt®-TCEP columns have the same high polarity as TCEP packed columns (precolumns in ASTM Method D4815 for the analysis of petroleum oxygenates), with the efficiency of a capillary column. The result is a column that can separate a wide variety of compounds with an elution pattern unattainable using other high polarity siloxanes.

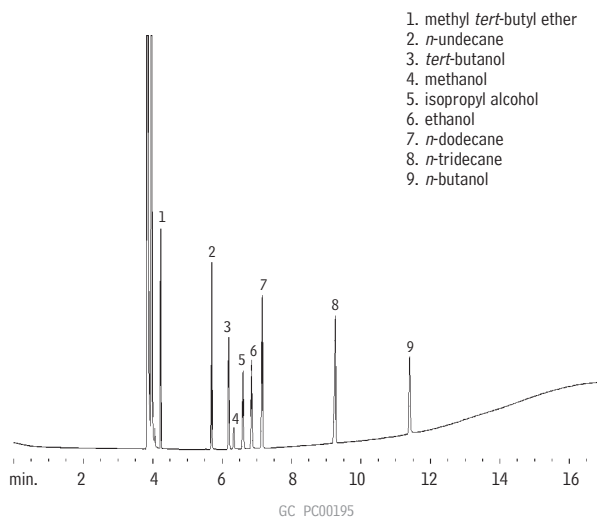
The Rt®-TCEP column incorporates a nonbonded stationary phase coated on a surface specialized for enhanced polymer stability and extended column lifetime. Solvent rinsing should be avoided. Conditioning is necessary only if the column is to be used at temperatures near the maximum operating temperature.

similar phases

SPB-TCEP, CP-TCEP

ID	df	temp. limits	30-Meter	60-Meter
0.25mm	0.40µm	0 to 135°C	10998	10999

Petroleum oxygenates on an Rt®-TCEP column.



Column: Rt®-TCEP, 60m, 0.25mm ID, 0.4µm (cat.# 10999)
 Inj.: 1.0µL split injection, components @ 500ppm.
 Oven temp.: 60°C (hold 5 min.) to 100°C @ 5°C/min. (hold 10 min.)
 Inj./det. temp.: 200°C
 Carrier gas: helium
 Linear velocity: 30cm/sec. set @ 80°C
 FID sensitivity: 6.4 x 10¹¹ AFS
 Split flow: 46mL/min.



Solutions For Your Petroleum & Petrochemical Analyses

Improved best-in-class GC columns • Standards • Industry experts at your service.

Visit us at www.restek.com/petro