

Restek GC Accessories

Same Separation, Speedier Solution

Get the same GC separation in less time—use a GC Accelerator kit and the *EZGC* method translator to accurately convert methods to a scaled-down column format.



RESTEK

Pure Chromatography

www.restek.com

Same Separation, Speedier Solution

- Get the same GC separation in less time—use a GC Accelerator kit and the EZGC method translator to accurately convert methods to a scaled-down column format.
- Scaled-down methods let you speed up analysis time and increase sample throughput without capital investment.
- GC Accelerator installs easily without damaging the GC column or interfering with the MS interface.

Designed with GC-MS users in mind, the GC Accelerator kit provides a simple way to speed up sample analysis. By reducing oven volume, these inserts allow faster ramp rates to be attained, which reduces oven cycle time and allows for increased sample throughput and more capacity to process rush samples. When faster ramp rates are used, existing methods can be accurately scaled down to smaller, high-efficiency, narrow-bore columns using Restek's EZGC method translator. With a scaled-down column, a properly translated method, and a GC Accelerator kit, you can obtain the same chromatographic separation—often with greater sensitivity—in a fraction of the time without making a capital investment.

It's Easy, Here's How:

Step 1:

Open the EZGC method translator (www.restek.com/ezgc-mtfc) and input your current method. Simply enter the carrier gas, column dimensions, flow rate, outlet pressure, and oven program that you currently use.

EZGC Method Translator

	Original	Translation
Carrier Gas	Helium	Helium
Column		
Length	30.00	20.00 m
Inner Diameter	0.25	0.15 mm
Film Thickness	0.25	0.15 μm
Phase Ratio	250	250
Control Parameters		
Outlet Flow	1.20	0.72 mL/min
Average Velocity	40.13	38.07 cm/sec
Holdup Time	1.25	0.88 min
Inlet Pressure (gauge)	11.43	31.20 psi
Outlet Pressure (abs)	0.00	0.00 psi
<input type="button" value="Atm"/> <input type="button" value="Vacuum"/>		
Oven Program		
<input type="radio"/> Isothermal <input checked="" type="radio"/> Ramps		
Number of Ramps	70	1
3 (1-4)	28 285 0	39.8 285 0
	3 305 0	4.3 305 0
	20 320 5	28.5 320 3.5
Control Method		
Constant Flow		
Results Solve for <input type="radio"/> Efficiency <input type="radio"/> Speed <input checked="" type="radio"/> Translate <input type="radio"/> Custom		
Run Time	21.10	14.78 min
Speed		1.43 x

Step 2:

Specify the dimensions of the scaled-down column that you want to use. Be sure the calculated phase ratios for both columns are similar.

Translated method parameters

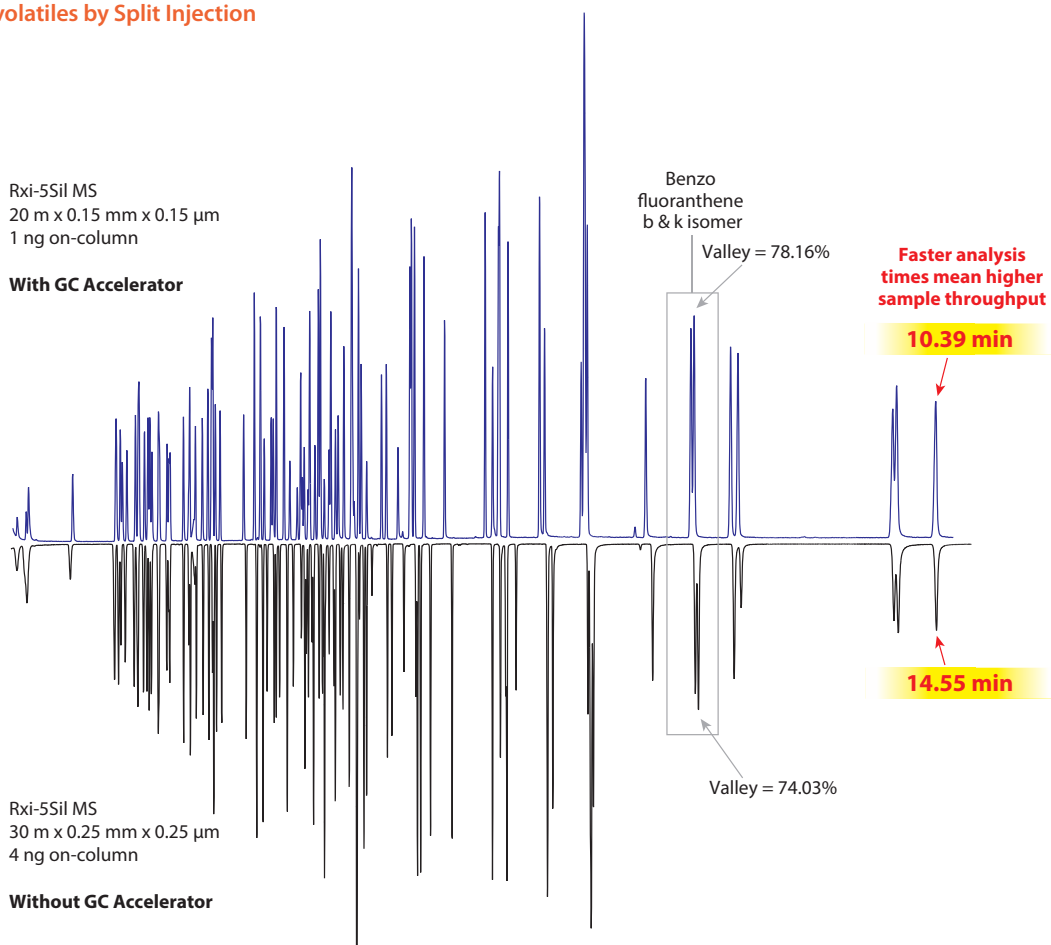
Step 3:

Select the control method and choose "Translate" to get a full set of new conditions that will provide similar chromatography in less time. Using a GC Accelerator kit allows your oven to meet the more aggressive ramp rates of the new method.

Learn more at www.restek.com/GCAccelerator

Get the same separation in a fraction of the time by scaling your method down to a smaller, more efficient column format with the EZGC method translator.

Example: Semivolatiles by Split Injection



Visit www.restek.com/GCAccelerator for technical details on how we optimized this analysis.

Scaling Down is Possible Because You Can Meet More Aggressive Ramp Rates with GC Accelerator Oven Insert Kits

Temperature Range (°C)	120 V Oven Ramp Rate (°C/min)		>200 V Oven Ramp Rate (°C/min)	
	Without GC Accelerator	With GC Accelerator	Without GC Accelerator	With GC Accelerator
50–70	75	120	120	120
70–115	45	95	95	120
115–175	40	65	65	110
175–300	30	40	45	70
300–350*	20	30	35	65

* Agilent ovens are programmable to 450 °C, but this product was only tested to a maximum operating temperature of 350 °C. Prior to analysis, confirm the analytical column can withstand the temperatures and ramp rates you plan to use.

GC Accelerator Oven Insert Kit

for Agilent 6890 and 7890 instruments

- Get the same separation in less time—use a GC Accelerator kit and the EZGC method translator to accurately convert methods to a scaled-down column format.



Description	qty.	cat.#
GC Accelerator Oven Insert Kit for Agilent 6890 and 7890 instruments	kit	23849

Rxi-5Sil MS Columns (fused silica)

low-polarity phase; Crossbond 1,4-bis(dimethylsiloxy)phenylene dimethyl polysiloxane

- Engineered to be a low-bleed GC-MS column.
- Excellent inertness for active compounds.

Description	temp. limits	qty.	cat.#
20 m, 0.15 mm ID, 0.15 μ m	-60 to 320/350 °C	ea.	43816

One-Stop Shopping for Your Agilent GC-MS Maintenance Needs

Whether you need GC-MS supplies for your Agilent gas chromatograph or mass spectrometer, Restek has you covered with an extensive offering of products for both.

- Autosampler parts and accessories
- Injection ports and inlet supplies
- Columns and consumables
- MS ion sources and electron multipliers
- Filaments, drawout plates, and more replacement parts for your Agilent MSD

See our full selection at www.restek.com/GCacc



Learn more at www.restek.com/GCAccelerator

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