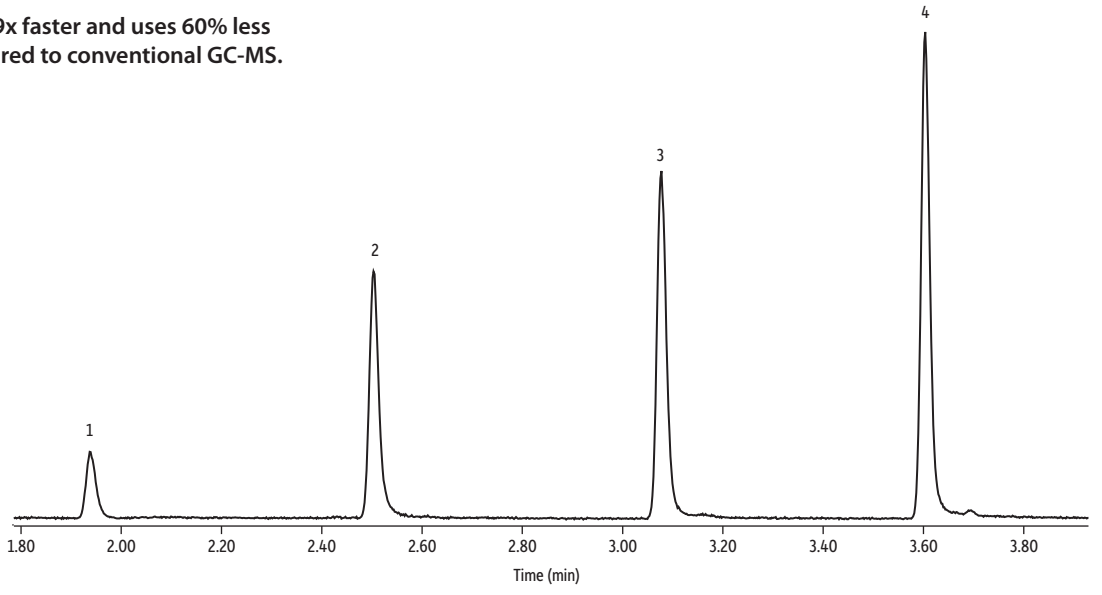
Fluorotelomer Alcohols on LPGC Rtx-200

LPGC-MS is 1.9x faster and uses 60% less helium compared to conventional GC-MS.



GC_EV1518

Peaks	t_R (min)	Conc. (µg/mL)	SIM Ion
1. 4:2 FTOH (2-perfluorobutyl alcohol)	1.94	1	131
2. 6:2 FTOH (2-perfluorohexyl alcohol)	2.51	1	131
3. 8:2 FTOH (2-perfluorooctyl alcohol)	3.08	1	131
4. 10:2 FTOH (2-perfluorodecyl alcohol)	3.61	1	131

Column	LPGC Rtx-200 column kit, includes 10 m x 0.32 mm ID x 1.00 µm Rtx-200 analytical column and 5 m x 0.15 mm ID Rxi restrictor factory connected via SilTite connector (cat.# 11807)
Standard/Sample	2-(Perfluorobutyl)ethanol 2-(Perfluorohexyl)ethanol 2-(Perfluorooctyl)ethanol 2-(Perfluorodecyl)ethanol
Diluent:	Methanol (PT)
Conc.:	1 µg/mL
Injection	
Inj. Vol.:	1 µL split (split ratio 5:1)
Liner:	Topaz, precision inlet liner, 4.0 mm x 6.3 x 78.5 (cat.# 23305)
Inj. Temp.:	280 °C
Split Vent Flow Rate:	4.5 mL/min
Oven	
Oven Temp.:	35 °C (hold 0.5 min) to 280 °C at 35 °C/min (hold 5 min)
Carrier Gas	He, constant flow
Flow Rate:	0.9 mL/min
Detector	MS
Mode:	SIM
SIM Program:	131 m/z, 300 ms dwell
Transfer Line Temp.:	280 °C
Analyzer Type:	Quadrupole
Source Temp.:	250 °C
Quad Temp.:	180 °C
Solvent Delay Time:	1.3 min
Tune Type:	PFTBA
Ionization Mode:	EI
Instrument	Agilent 7890A GC & 5975C MSD
Sample Preparation	All standards were combined into one solution at concentration 1 ppm in polypropylene vial (cat. #23242) with a polypropylene cap (cat. #23244). A 50 µL aliquot was analyzed by GC-MS using 100 µL insert (cat. #24512).
Notes	Pulsed split injection was used; 30 psi until 0.15 min.