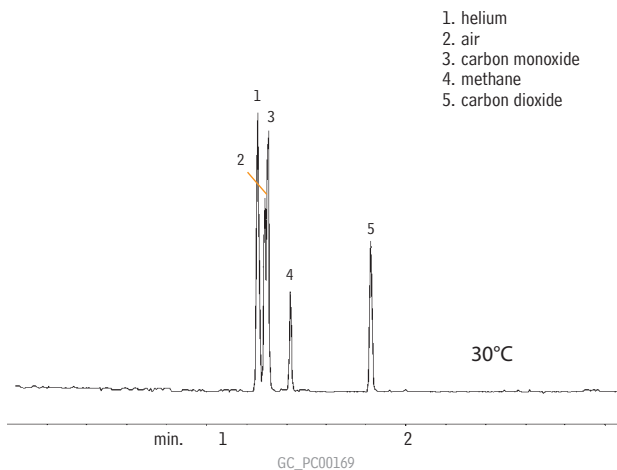


Permanent Gases

Rt™-QPLOT

(PLOT)



1. helium
2. air
3. carbon monoxide
4. methane
5. carbon dioxide

Column: Rt™-QPLOT, 30m, 0.32mm ID (cat.# 19718)
 Sample: 30 μ L split injection (40:1), 2-5 mol%
 Column temp.: 30°C
 Inj. temp.: 30°C
 Det.: HP μ TCD
 Det. temp.: 200°C
 Carrier gas: hydrogen
 Linear velocity: 38cm/sec.
 Split flow: 40:1

Chlorofluorocarbon Gases

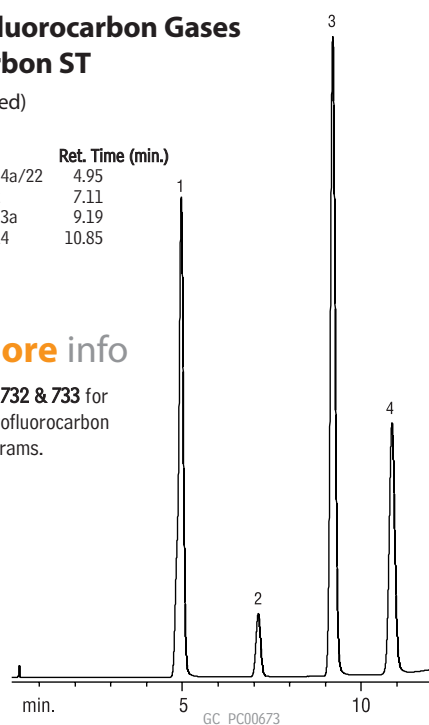
ShinCarbon ST

(micropacked)

Peak	Ret. Time (min.)
1. Freon® 134a/22	4.95
2. Freon® 12	7.11
3. Freon® 133a	9.19
4. Freon® 114	10.85

for more info

see pages 732 & 733 for more chlorofluorocarbon chromatograms.

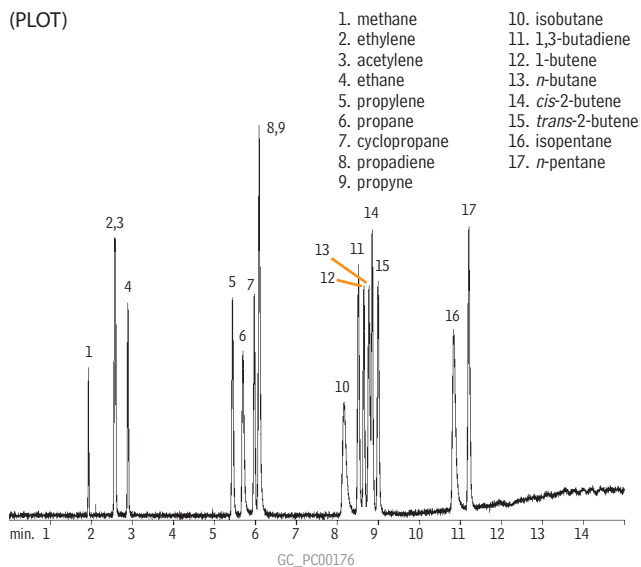


Column: ShinCarbon ST, 100/120 mesh, 1m, 1mm ID
 Silcosteel® micropacked column (cat.# 19809)
 Sample: fluorocarbon blend, 5 μ L ~1-3% each
 Inj. temp.: 200°C
 Det.: FID @ 250°C
 Carrier gas: helium
 Linear velocity: 10mL/min.
 Oven temp.: 125°C to 320°C @ 16°C/min.

Hydrocarbon Gases

Rt™-QPLOT

(PLOT)



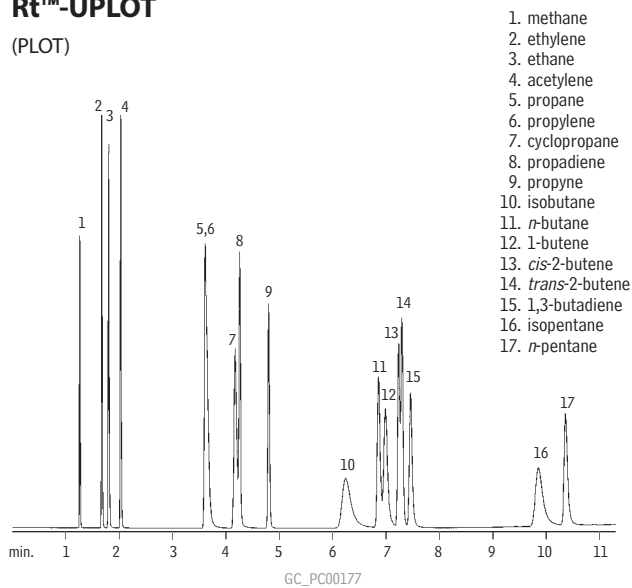
1. methane
2. ethylene
3. acetylene
4. ethane
5. propylene
6. propane
7. cyclopropane
8. propadiene
9. propyne
10. isobutane
11. 1,3-butadiene
12. 1-butene
13. *n*-butane
14. *cis*-2-butene
15. *trans*-2-butene
16. isopentane
17. *n*-pentane

Column: Rt™-QPLOT, 30m, 0.32mm ID (cat.# 19718)
 Inj.: 300 μ L split injection (40:1), 1000ppm
 Oven temp.: 50°C (2 min.) to 220°C @ 15°C/min.
 Inj./det. temp.: 250°C
 Carrier gas: helium
 Linear velocity: 42cm/sec. set @ 80°C (5.6mL/min.)
 Split flow: 40mL/min.
 FID sensitivity: 1.28 x 10¹⁰ AFS

Hydrocarbon Gases

Rt™-UPLOT

(PLOT)



1. methane
2. ethylene
3. ethane
4. acetylene
5. propane
6. propylene
7. cyclopropane
8. propadiene
9. propyne
10. isobutane
11. *n*-butane
12. 1-butene
13. *cis*-2-butene
14. *trans*-2-butene
15. 1,3-butadiene
16. isopentane
17. *n*-pentane

Column: Rt™-UPLOT, 30m, 0.32mm ID (cat.# 19724)
 Inj.: 300 μ L split injection (40:1), 1000ppm
 Oven temp.: 50°C to 190°C @ 10°C/min.
 Inj./det. temp.: 250°C
 Carrier gas: helium
 Linear velocity: 42cm/sec. set @ 80°C (5.6mL/min.)
 Split flow: 40mL/min.
 FID sensitivity: 1.28 x 10¹⁰ AFS