

Atlas of Chromatograms**Gas Chromatographic Analysis of Hydrocarbons on PLOT Columns**

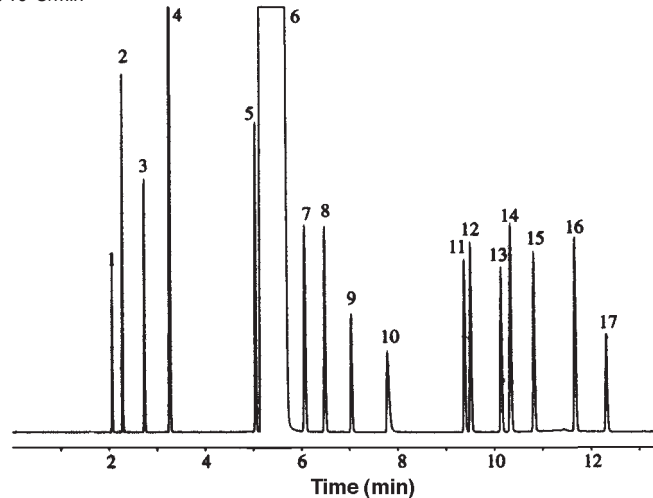
GC262

Propylene impurities, alumina PLOT Column**Conditions:**

Sample 99% Propylene spiked with hydrocarbon mixture
 Sample introduction Split injection, 60:1 ratio, 100- μ L gas-tight syringe
 Column 50 m \times 0.53-mm i.d. fused-silica
 Column phase Rt-alumina PLOT column (Restek); alumina
 Detector Flame ionization, 1.28×10^{-10} AFS
 Carrier gas Helium, 37.5 cm/s
 Oven temperature Initially 40°C for 3 min, then to 120°C at 10°C/min

Peaks:

1. Methane
2. Ethane
3. Ethylene
4. Propane
5. Cyclopropane
6. Propylene
7. Isobutane
8. *n*-Butane
9. Propadiene
10. Acetylene
11. *trans*-2-Butene
12. 1-Butene
13. *cis*-2-Butene
14. Isopentane
15. *n*-Pentane
16. 1,3-Butadiene
17. Propyne



GC263

C₁-C₅ hydrocarbon mix, Porapak Q PLOT column**Conditions:**

Sample C₁-C₅ hydrocarbon mix (100 ppm)
 Sample introduction Split injection, 40:1 ratio, 300- μ L injection
 Column 30 m \times 0.32-mm i.d. fused-silica
 Column phase Rt-QPLOT PLOT column (Restek); Porapak Q porous polymer
 Detector Flame ionization, 1.28×10^{-10} AFS
 Carrier gas Helium, 42 cm/s
 Oven temperature 50°C (2 min) to 220°C at 15°C/min

Peaks:

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

