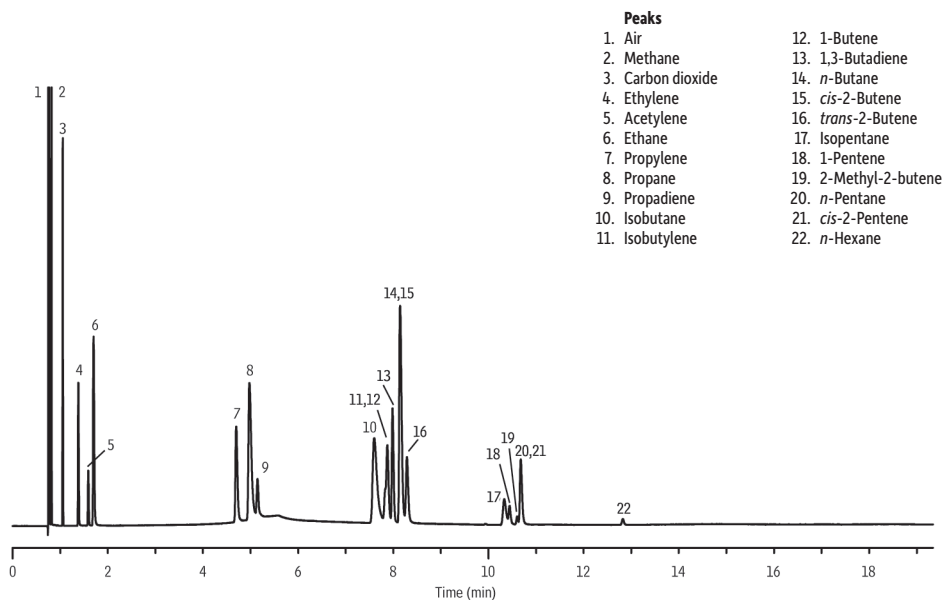


**Refinery Gas Mixture
Rt®-QS-BOND**



- Peaks**
- | | |
|-------------------|----------------------------|
| 1. Air | 12. 1-Butene |
| 2. Methane | 13. 1,3-Butadiene |
| 3. Carbon dioxide | 14. <i>n</i> -Butane |
| 4. Ethylene | 15. <i>cis</i> -2-Butene |
| 5. Acetylene | 16. <i>trans</i> -2-Butene |
| 6. Ethane | 17. Isopentane |
| 7. Propylene | 18. 1-Pentene |
| 8. Propane | 19. 2-Methyl-2-butene |
| 9. Propadiene | 20. <i>n</i> -Pentane |
| 10. Isobutane | 21. <i>cis</i> -2-Pentene |
| 11. Isobutylene | 22. <i>n</i> -Hexane |

GC_PC1143

Column Rt®-QS-BOND, 30 m, 0.53 mm ID, 20 µm (cat.# 19738)
Sample refinery gas standard

Injection
 Inj. Vol.: 20 µL split
 Liner: 2mm Splitless (cat.# 20712)
 Inj. Temp.: 200 °C
Split Vent Flow
 Rate: 35 mL/min.

Oven
 Oven Temp: 40 °C (hold 2 min.) to 225 °C at 15 °C/min. (hold 5 min.)

Carrier Gas He, constant pressure (11.5 psi, 79.3kPa)
 Linear Velocity: 68 cm/sec. @ 40 °C

Detector TCD @ 225 °C
 Make-up Gas Type: He
 Data Rate: 20 Hz
 Sensitivity Mode: He/H₂

Instrument HP5890 GC