



## Hydrocarbons, $C_1 - C_6$

### Separation of light hydrocarbons on a non-polar porous polymer

#### Application Note

Energy & Fuels

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#### Introduction

Gas chromatography with an Agilent PoraPLOT Q column separates 21 light hydrocarbons in 30 minutes.



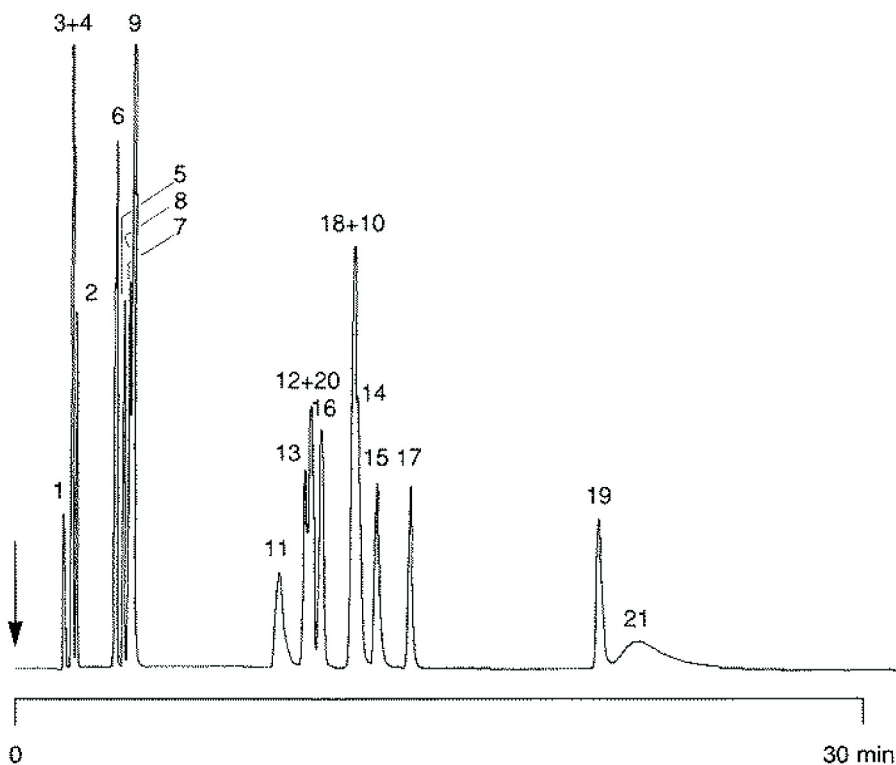
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## Conditions

Technique : GC-wide-bore  
Column : Agilent PoraPLOT Q, 0.32 mm x 25 m fused silica  
PLOT (df = 20 µm) (Part no. CP7551)  
Temperature : 75 °C  
Carrier Gas : H<sub>2</sub>, 40 cm/s  
Injector : Direct,  
T = 100 °C  
Detector : FID  
T = 150 °C  
Sample Size : 6 µL  
Concentration Range : 0.1% in nitrogen

## Peak identification

1. methane
2. ethane
3. ethylene
4. acetylene
5. propane
6. propylene
7. propadiene
8. cyclopropane
9. propyne
10. butane
11. isobutane
12. 1-butene
13. isobutene
14. trans-2-butene
15. cis-2-butene
16. 1,3-butadiene
17. 1,2-butadiene
18. 1-butyne
19. 2-butyne
20. vinylacetylene
21. 2,2-dimethylpropane (neopentane)



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