



Hydrocarbons, $C_1 - C_6$

Separation of light hydrocarbons on a slightly polar porous polymer

Application Note

Energy & Fuels

Authors

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Introduction

Gas chromatography with an Agilent PoraPLOT S column separates 21 light hydrocarbons in 14 minutes.



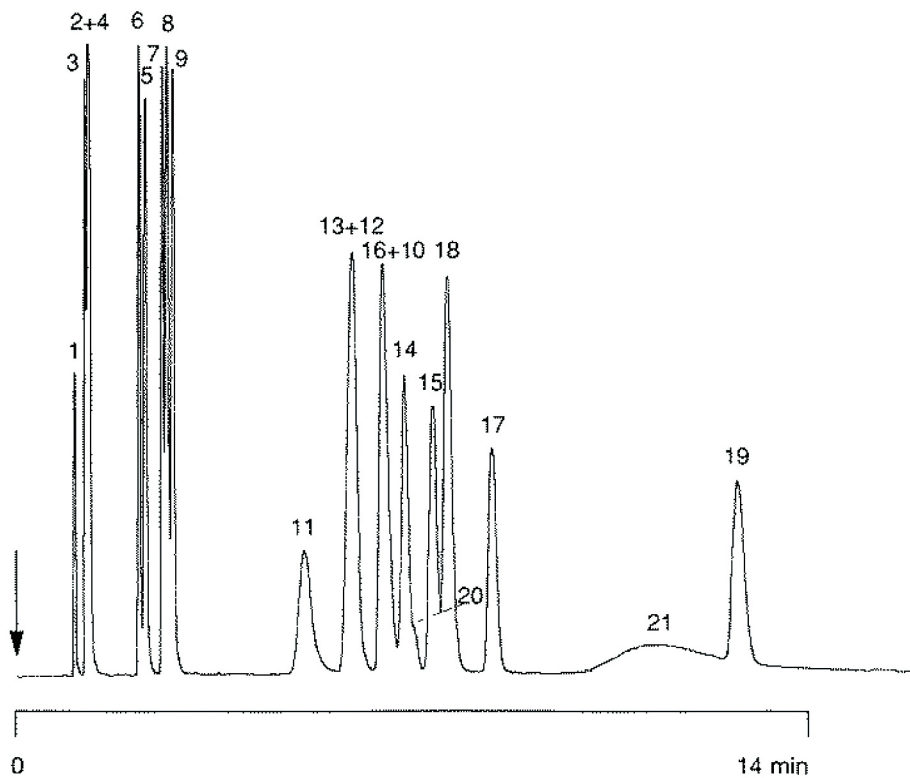
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Conditions

Technique : GC-wide-bore
Column : Agilent PoraPLOT S, 0.53 mm x 25 m fused silica
PLOT (df = 20 μ m) (Part no. CP7574)
Temperature : 75 $^{\circ}$ C
Carrier Gas : H₂, 40 cm/s
Injector : Direct,
T = 100 $^{\circ}$ C
Detector : FID
T = 150 $^{\circ}$ C
Sample Size : 6 μ L
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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