

Hydrocarbons, $C_1 - C_3$

Application Note

Energy & Fuels

Authors

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Introduction

Normally, Porapak Q type phases elute acetylene together with ethylene. On Agilent PoraBOND Q, however, the acetylene peak elutes before ethylene and all C_3 isomers are baseline separated. The high purity of the PoraBOND Q porous polymer also operates a maximum temperature of 320 °C making a quick bake-out and short analysis times possible. There are no particles present in the PoraBOND Q as the porous layer is chemically bonded, allowing direct valve injections or switching applications.



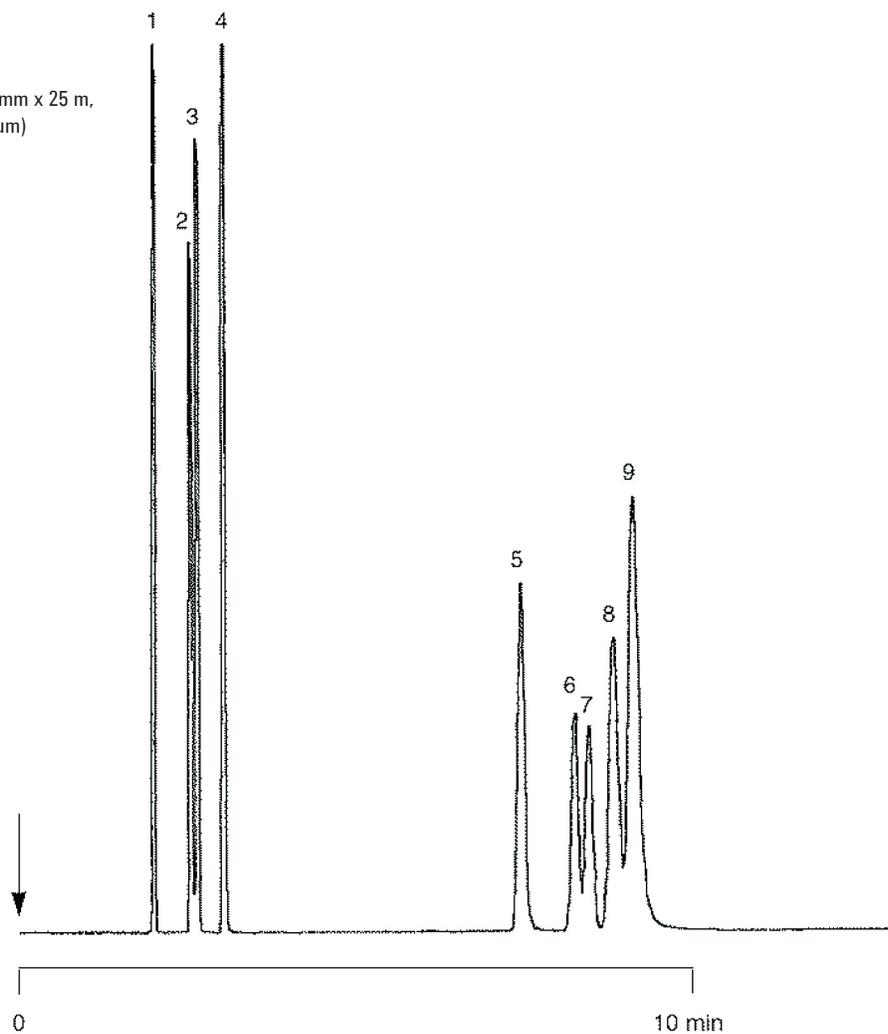
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Conditions

Technique : GC-wide-bore
Column : Agilent PoraBOND Q, 0.53 mm x 25 m,
fused silica PLOT (df = 10 μ m)
(Part no. CP7354)
Temperature : 60 °C
Carrier Gas : He, 20 kPa (0.2 bar, 3 psi)
Injector : Split, 1:50
T = 250 °C
Detector : FID
T = 250 °C
Sample Size : 40 μ L
Concentration Range : 1% in N₂

Peak identification

1. methane
2. acetylene
3. ethylene
4. ethane
5. propylene
6. propadiene
7. propyne (methylacetylene)
8. propane
9. cyclopropane



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This information is subject to change without notice.

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