



Hydrocarbons, C₁-C₃

Analysis of trace cyclopropane in propylene

Application Note

Energy & Fuels

Authors

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Introduction

The Agilent CP-SilicaPLOT has a unique selectivity, as it's the only capillary that elutes cyclopropane in front of propylene, with such high resolution that low ppm levels of cyclopropane can be measured in a matrix of propylene.



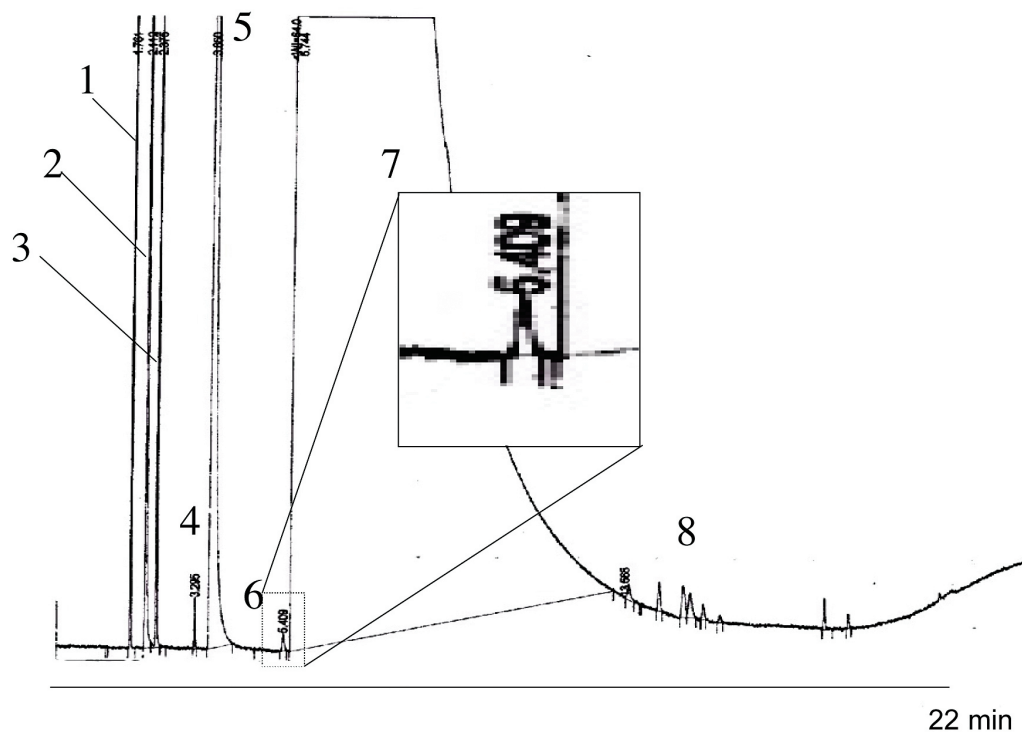
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Conditions

Technique : GC
Column : Agilent CP-SilicaPLOT, 0.32 mm x 30 m fused silica
(df = 4 μ m) (Part no. CP8567)
Temperature : 50 °C (5 min) \rightarrow 100 °C, 5 °C/min \rightarrow 200 °C,
20 °C/min
Carrier Gas : Helium, 124 kPa
Injector : Valve injector, outlet connected to splitter, 1:10,
T = 250 °C
Detector : FID
T = 250 °C
Sample Size : 250 μ L
Concentration Range : ppm
Matrix Sample : propylene

Peak identification

1. methane
2. ethane
3. ethylene
4. acetylene
5. propane
6. cyclo propane
7. propylene
8. C4-hydrocarbons



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