



Hydrocarbons, C₁ – C₃ gases

Separation of C₁-C₃ and CO/CO₂

Application Note

Energy & Fuels

Authors

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Introduction

Carbon dioxide is well separated from the C₂ hydrocarbons and elutes with significant retention; hydrocarbon samples containing CO₂ can be analyzed very well on the CP-SilicaPLOT column without affecting the selectivity of the column.



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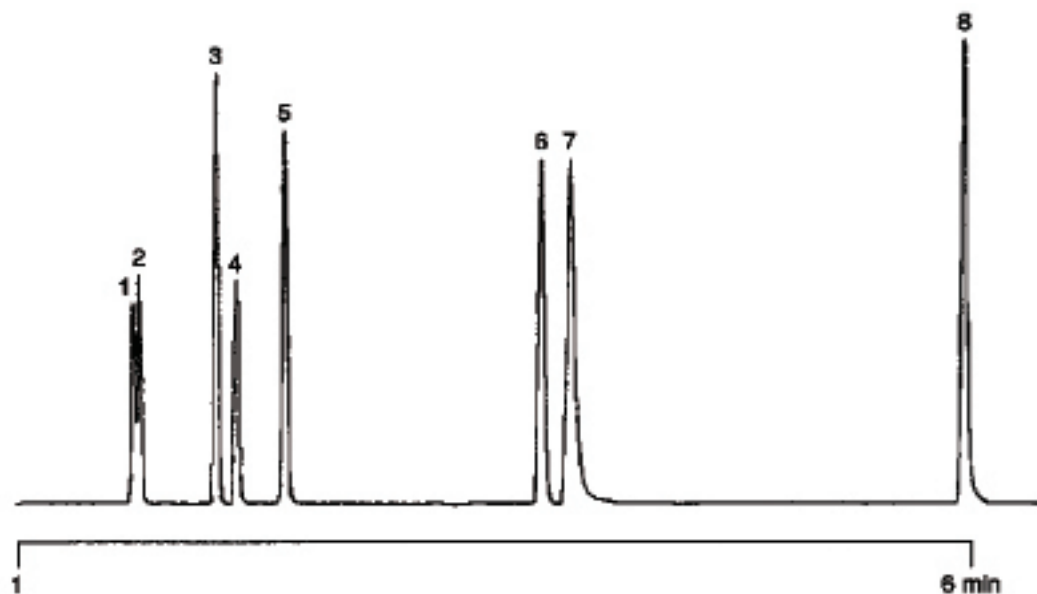
Conditions

Technique : GC-capillary
Column : Agilent CP-SilicaPLOT, 0.32 mm x 30 m, fused silica
PLOT CP-SilicaPLOT (df = 4 µm) (Part no. CP8567)
Temperature : 30 °C (2 min) → 250 °C, 10 °C/min
Carrier Gas : He, 210 kPa (2.1 bar, 30 psi)
Injector : Split, 1:100
T = 200 °C
Detector : AED Carbon channel, C 193
T = 250 °C
Sample Size : 0.5 mL
Concentration Range : 100 ppm in N₂

Courtesy : Jim Luong, The Dow Chemical Company, Canada

Peak identification

1. carbon monoxide
2. methane
3. ethane
4. carbon dioxide
5. ethylene
6. acetylene
7. propane
8. propylene



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This information is subject to change without notice.

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DE44488.1063541667

Printed in the USA

October 18, 2021

First published prior to 11 May, 2010

A01287



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