Oxygenated hydrocarbons

Separation of DME, MTBE and ETBE

Application Note

Energy & Fuels

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography using an Agilent CP-SilicaPLOT column separates DME, MTBE and ETBE in 30 minutes.

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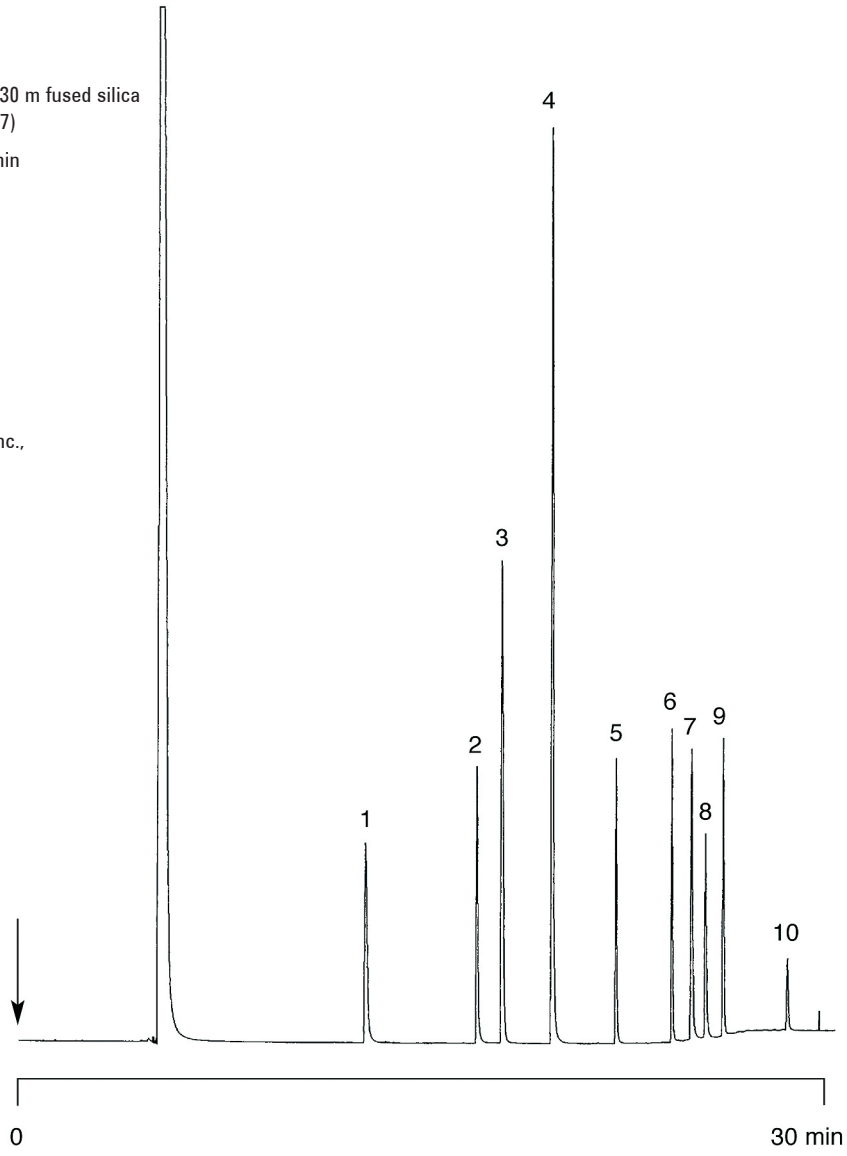
Conditions

Technique	: GC-wide-bore
Column	: Agilent CP-SilicaPLOT, 0.32 mm x 30 m fused silica PLOT (df = 4 µm) (Part no. CP8567)
Temperature	: 90 °C (10 min) ⟶ 250 °C, 10 °C/min
Carrier Gas	: He, 150 kPa (1.5 bar, 21 psi)
Injector	: Split, T = 250 °C
Detector	: ECD T = 275 °C
Solvent Sample	: pentane
Courtesy	: J. Kuipers, Agilent Technologies Inc., Middelburg, The Netherlands

Peak identification

1. C_6
2. C_7
3. dimethyl ether (DME)
4. C_8
5. C_9
6. C_{10}
7. methyl-tertiary-butyl-ether (MTBE)
8. ethyl-tertiairy-butyl-ether (ETBE)
9. C_{11}
10. C_{12}



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