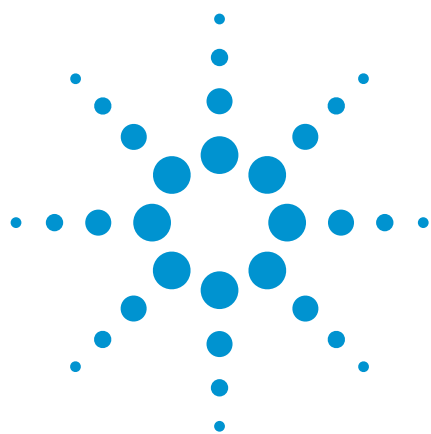




Alkenes C₃ – C₄ (butenes)

Analysis of butenes on a capillary column

Application Note

Energy & Fuels

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography using an Agilent CP-Al₂O₃/KCl column separates a mixture of butenes in just over 30 minutes.



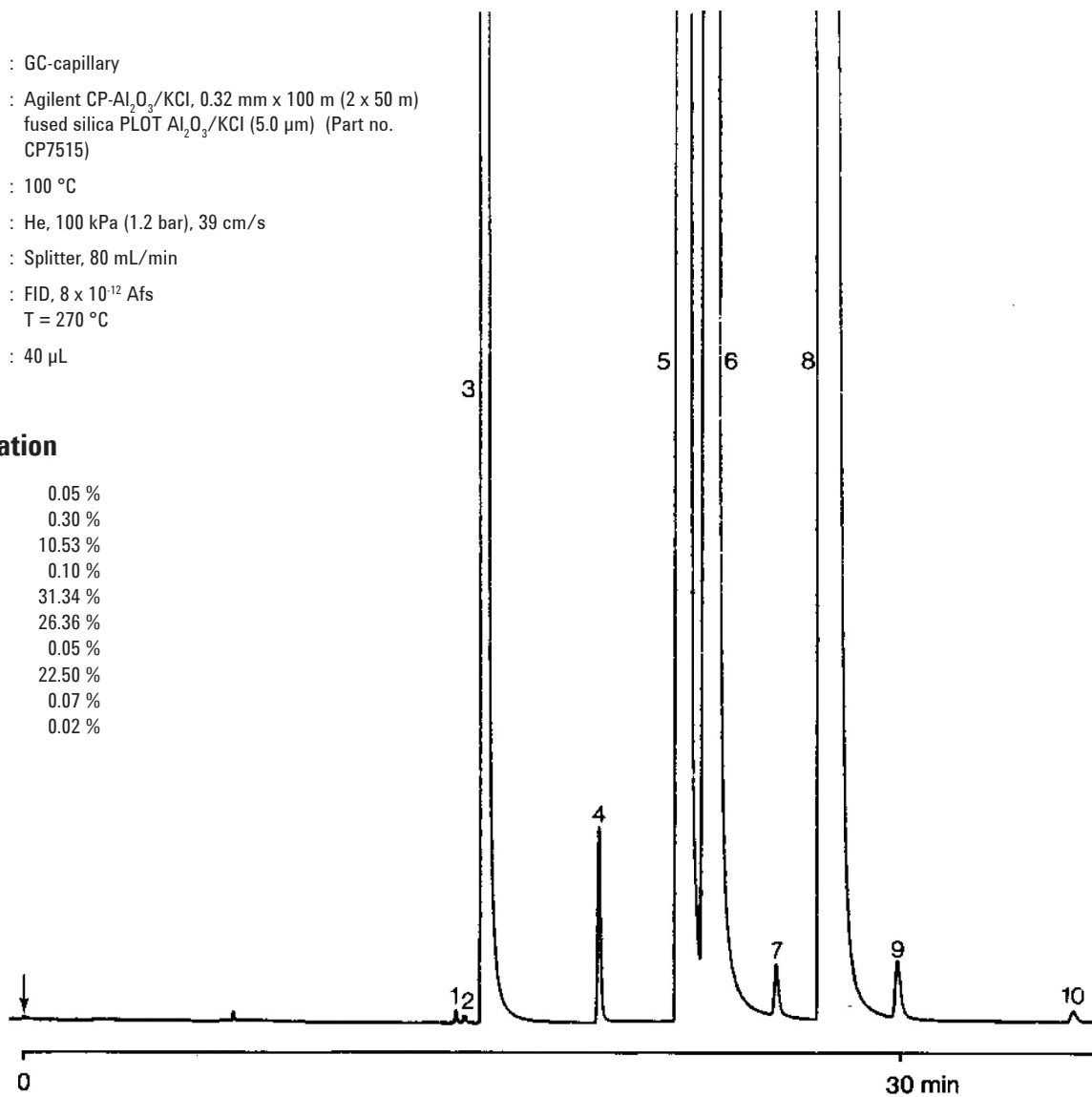
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Conditions

Technique : GC-capillary
Column : Agilent CP-Al₂O₃/KCl, 0.32 mm x 100 m (2 x 50 m)
fused silica PLOT Al₂O₃/KCl (5.0 µm) (Part no. CP7515)
Temperature : 100 °C
Carrier Gas : He, 100 kPa (1.2 bar), 39 cm/s
Injector : Splitter, 80 mL/min
Detector : FID, 8 x 10⁻¹² Afs
T = 270 °C
Sample Size : 40 µL

Peak identification

1. unknown	0.05 %
2. isobutane	0.30 %
3. n-butane	10.53 %
4. unknown	0.10 %
5. trans-2-butene	31.34 %
6. 1-butene	26.36 %
7. isobutene	0.05 %
8. cis-2-butene	22.50 %
9. unknown	0.07 %
10. propyne	0.02 %



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This information is subject to change without notice.

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