



Light hydrocarbons (alkanes, alkenes) $C_1 - C_4$

Analysis of 1,3-butadiene on a capillary column

Application Note

Materials Testing & Research

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography using an Agilent CP-Al₂O₃/KCl column separates 11 C₁ to C₄ alkanes and alkenes in 15 minutes.



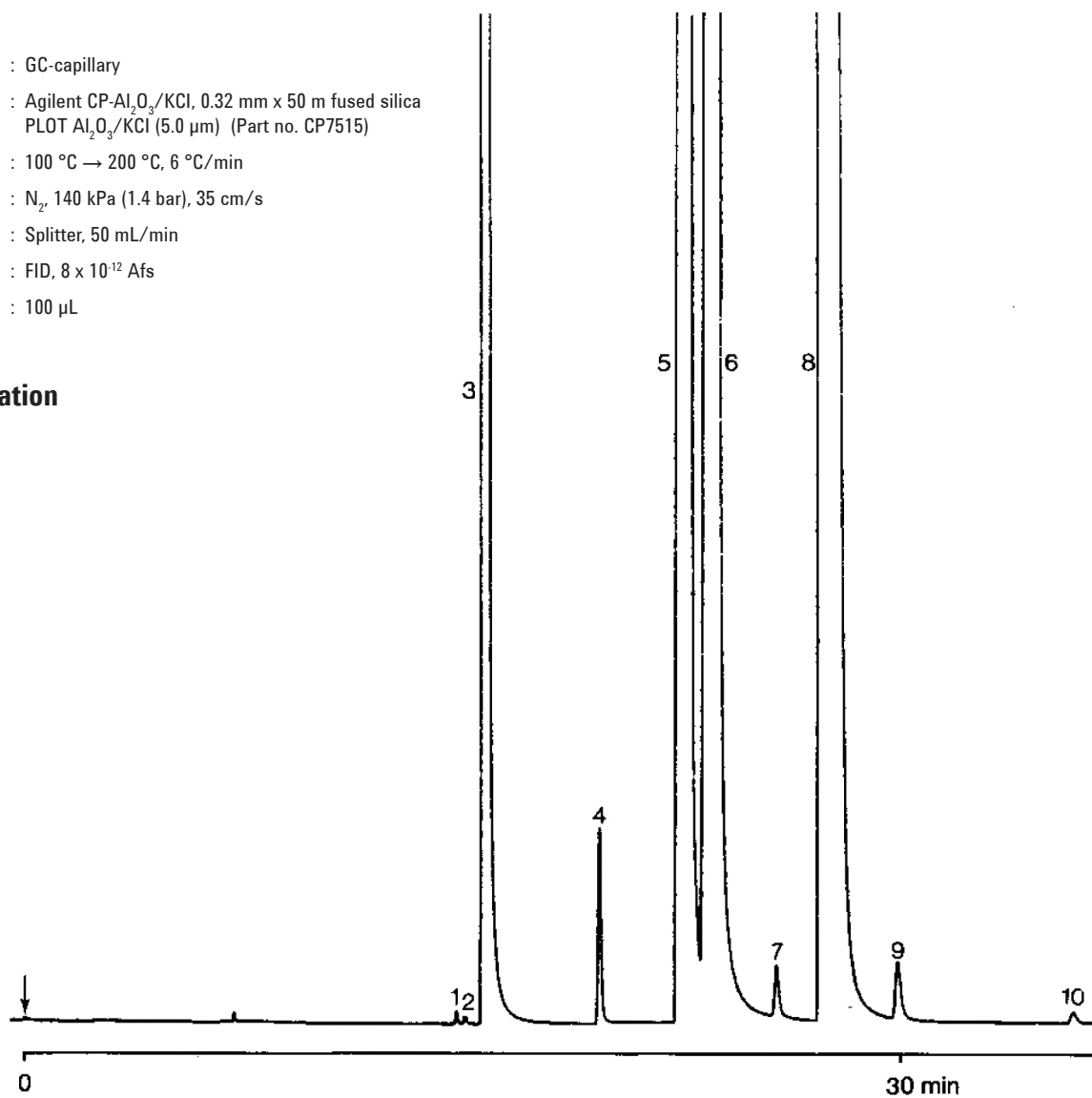
Agilent Technologies

Conditions

Technique : GC-capillary
Column : Agilent CP-Al₂O₃/KCl, 0.32 mm x 50 m fused silica
PLOT Al₂O₃/KCl (5.0 µm) (Part no. CP7515)
Temperature : 100 °C → 200 °C, 6 °C/min
Carrier Gas : N₂, 140 kPa (1.4 bar), 35 cm/s
Injector : Splitter, 50 mL/min
Detector : FID, 8 x 10⁻¹² Afs
Sample Size : 100 µL

Peak identification

1. methane
2. ethane
3. propane
4. propene
5. iso-butane
6. n-butane
7. trans-2-butene
8. 1-butene
9. isobutene
10. cis-2-butene
11. 1,3-butadiene



www.agilent.com/chem

This information is subject to change without notice.

© Agilent Technologies, Inc. 2011

Printed in the USA

31 October, 2011

First published prior to 11 May, 2010

A00022



Agilent Technologies