



Hydrocarbons, $C_2 - C_4$

Analysis of impurities in propylene

Application Note

Energy & Fuels

Authors

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Introduction

Gas chromatography using an Agilent CP- Al_2O_3/KCl column separates ten impurities in propylene in 14 minutes.



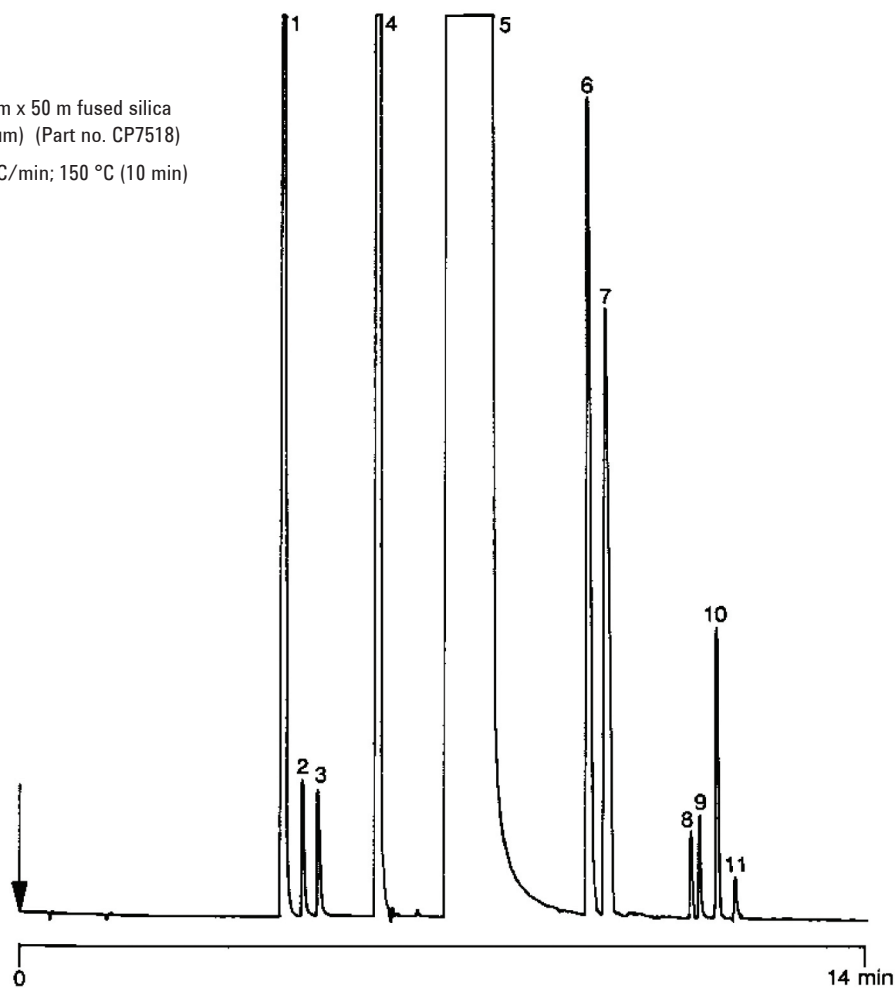
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Conditions

Technique : GC-capillary
Column : Agilent CP-Al₂O₃/KCl, 0.53 mm x 50 m fused silica
PCOT CP-Al₂O₃/KCl (df = 10 µm) (Part no. CP7518)
Temperature : 50 °C (6 min) → 150 °C. 15 °C/min; 150 °C (10 min)
Carrier Gas : He, 21 kPa (0.21 bar, 3 psi)
Injector : Splitter, 5 mL/min
T = 150 °C
Detector : FID
T = 200 °C
Sample Size : 500 µL
Courtesy : Dow Deutschland Inc.
Werk Stade, PO-PG-Lab,
Mr Detlef Korczewski

Peak identification Concentration range:

1. methane	206 ppm
2. ethane	50 ppm
3. ethylene	41 ppm
4. propane	1600 ppm
5. propylene	
6. isobutane	2760 ppm
7. n-butane	552 ppm
8. trans-2-butene	28 ppm
9. 1-butene	16 ppm
10. isobutene	27 ppm
11. cis-2-butene	10 ppm



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This information is subject to change without notice.

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