Hydrocarbons, C_1 – C_6

Analysis of light hydrocarbons

Application Note

Energy & Fuels

Authors

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Introduction

Gas chromatography using an Agilent CP-Al_2O_3/KCl column separates 20 light hydrocarbons in 15 minutes.

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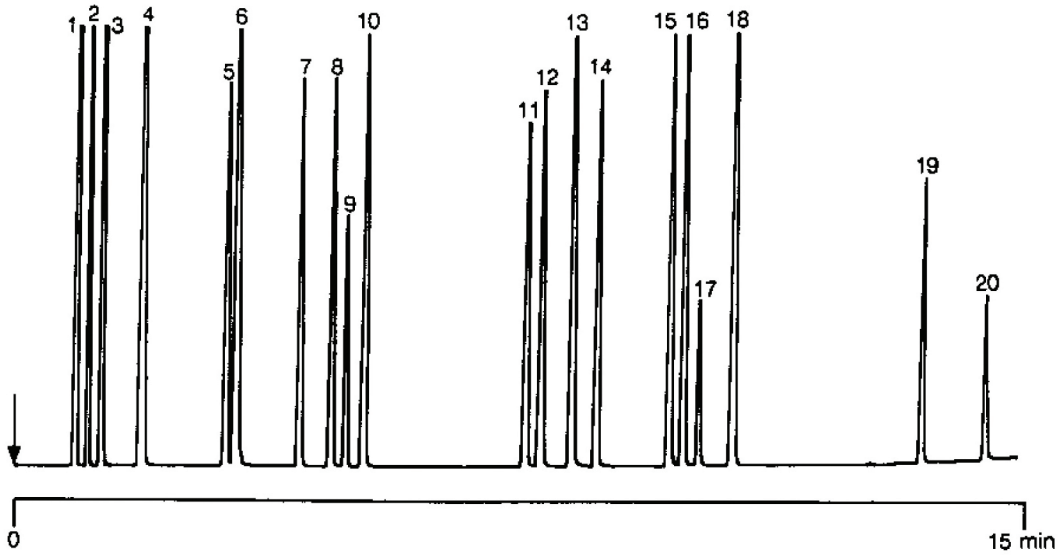
Conditions

Technique	:	GC-capillary
Column	:	Agilent CP-Al_2O_3/KCl, 0.32 mm x 50 m fused silica PLOT CP-AL_2O_3/KCl (df = 5 µm) (Part no. CP7515)
Temperature	:	70 °C (4 min) ⟶ 180°C, 10 °C/min
Carrier Gas	:	He, 250 kPa (2.5 bar, 35 psi)
Injector	:	Splitter, 400 mL/min
Detection	:	FID T = 190 °C

Peak identification

1. methane
2. ethane
3. ethylene
4. propane
5. cyclopropane
6. propylene
7. acetylene
8. isobutane
9. propadiene
10. butane
11. trans-2-butene
12. 1-butene
13. isobutene
14. cis-2-butene
15. isopentane
16. propyne
17. pentane
18. 1,3-butadiene
19. ethylacetylene
20. hexane



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