Hydrocarbons, C_1 – C_4

Application Note

Energy & Fuels

Authors

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Introduction

Retention times of C_1 - C_4 hydrocarbons on the Agilent CP-SilicaPLOT column are not influenced by polar impurities such as water, sulfur compounds or carbon dioxide. Only the Al_2O_3 PLOT column provides a higher selectivity for C_4-isomers.

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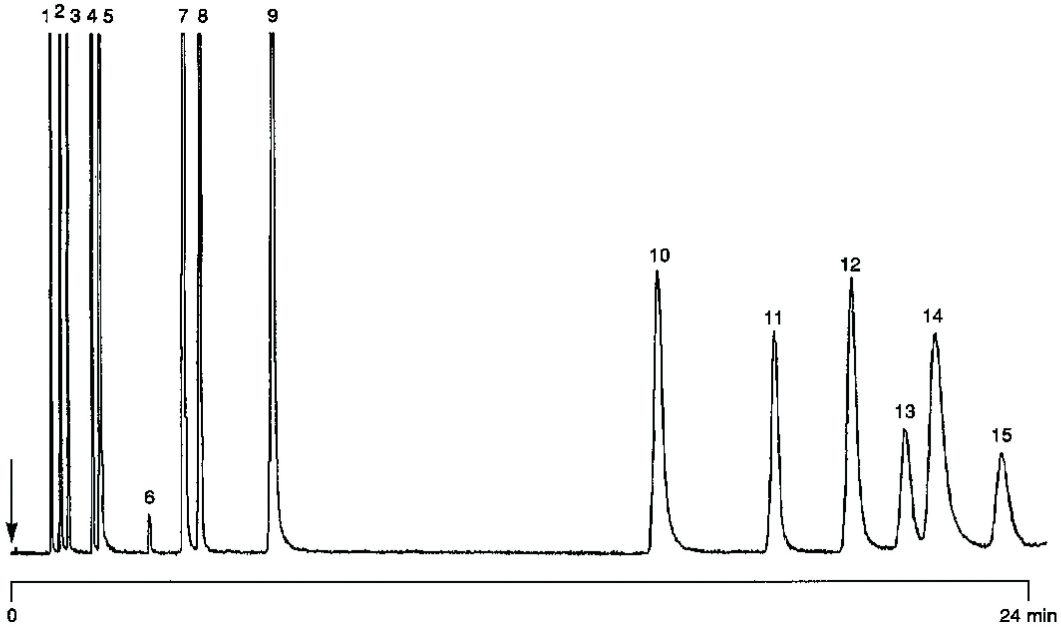
Conditions

Technique	:	GC-capillary
Column	:	Agilent CP-SilicaPLOT, 0.32 mm x 30 m, fused silica PLOT (df = 4 µm) (Part no. CP8567)
Temperature	:	60 °C
Carrier Gas	:	He, 150 kPa (1.5 bar, 21 psi)
Injector	:	Split, T = 250 °C
Detector	:	FID T = 250 °C
Concentration range	:	1% in N_2

Peak identification

1. methane
2. ethane
3. ethylene
4. acetylene
5. propane
6. cyclopropane
7. propylene
8. isobutane
9. butane
10. 1-butene
11. propyne (methylacetylene)
12. 1,3-butadiene
13. trans-2-butene
14. isobutene
15. cis-2-butene



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