



Hydrocarbons, C₆ - C₉

Reference method for monitoring systems for analysis of hydrocarbons in environmental air

Application Note

Environmental

Authors

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Introduction

Monitoring VOCs in air is controlled by automated systems, based on thermal desorption techniques. A good separation of a standard mixture is obtained on the Agilent CP-Sil 5 CB column. No compounds of interest show the same retention as cyclohexene, which is used as internal standard.



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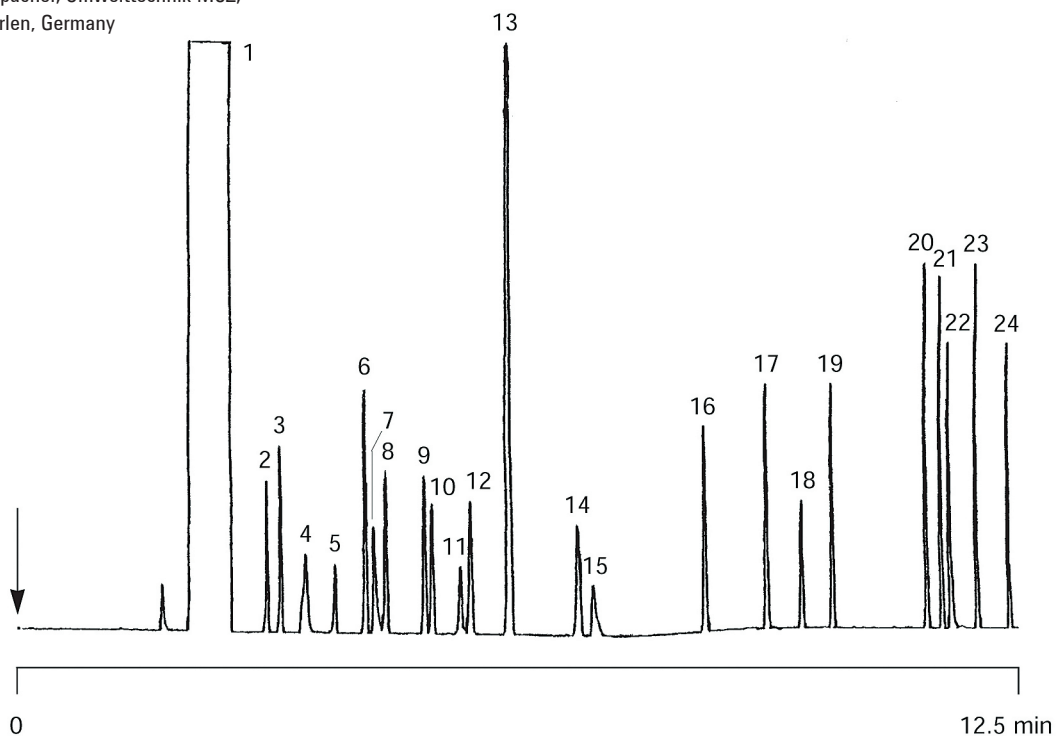
Conditions

Technique : GC-capillary
Column : Agilent CP-Sil 5 CB, 0.25 mm x 25 m (df = 0.4 µm)
(Part no. CP7709)
Temperature : 35 °C (7.5 min) → 55 °C, 20 °C/min;
55 °C → 80 °C, 12.5 °C/min;
80 °C → 120 °C, 20 °C/min
Carrier Gas : He
Injector : Split,
T = 200 °C
Detector : FID
T = 200 °C
Sample Size : 10 µL
Sample Solvent : CS₂

Courtesy : G. Hackspacher, Umwelttechnik MCZ,
Ober Mörlen, Germany

Peak identification

1. carbon disulfide
2. 1-hexene
3. hexane
4. 2-butanol
5. 1,1,1-trichloroethane
6. benzene
7. butanol
8. cyclohexane
9. cyclohexene (I.S.)
10. 3-methylhexane
11. trichloroethylene
12. heptene
13. heptane
14. methylcyclohexane
15. methyl isobutyl ketone
16. toluene
17. 3-methylheptane
18. cycloheptane
19. octane
20. ethylbenzene
21. m/p-xylene
22. cyclohexanone
23. o-xylene
24. nonane



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