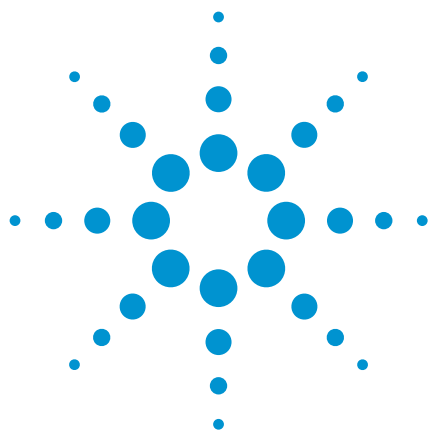




Halogenated and aromatic hydrocarbons, $C_1 - C_{10}$

Application Note

Environmental

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography with an Agilent CP-Sil 8 CB column separates 42 C_1 to C_{10} aromatic hydrocarbons in 23 minutes.



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Conditions

Technique : GC-capillary

Column : Agilent CP-Sil 8 CB, 0.32 mm x 50 m fused silica
WCOT CP-Sil 8 CB (1.2 µm) (Part no. CP7771)

Temperature : 40 °C (4 min) → 250 °C, 8.5 °C/min; 250 °C (2 min)

Carrier Gas : He, 100 kPa (1.0 bar, 15 psi), 30 cm/s

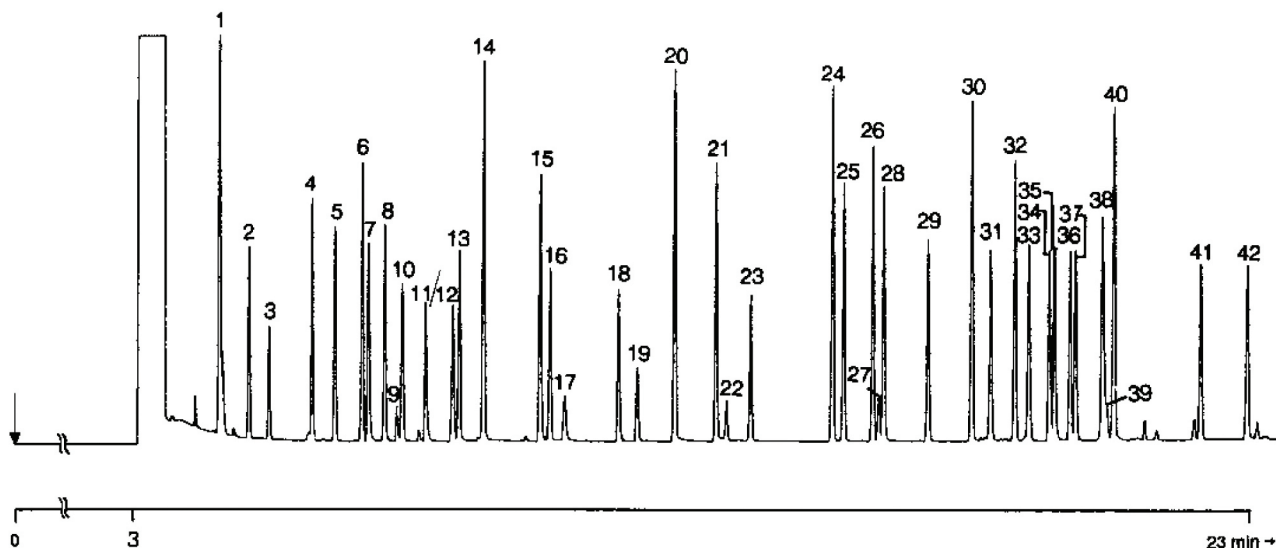
Injector : TCT
Cold Trap material: 0.32 mm x 50 m ID fused silica
WCOT: CP-Sil 5 CB (5.0 µm) + 2 cm Chromosorb 101 (60 - 80 mesh)
Cryofocussing : -120 °C
Precool time : 4 min
Desorb time : 10 min
Desorb flow : 15 mL/min
Desorption oven temp. : 230 °C
Injection temp. : 150 °C
Injection time : 5 min
GC-injection block temp. : 275 °C

Detector : FID, 32 x 10¹² Afs
T = 275 °C

Sample Handling : Matrix : liquid
Sample size : 1L
Concentration range : 50 ng/L water
Sample temperature : 95 °C

Peak identification

- | | |
|-----------------------------|--------------------------------|
| 1. ethanol | 22. dibromochloromethane |
| 2. 1,1-dichloroethene | 23. 1,1,2,2-tetrachloroethene |
| 3. methylchloride | 24. ethylbenzene |
| 4. trans-1,2-dichloroethene | 25. m-xylene + p-xylene |
| 5. 1,1-dichloroethane | 26. nonane |
| 6. hexane | 27. tribromomethane |
| 7. 2-butanone (MEK) | 28. o-xylene |
| 8. cis-1,2-dichloroethene | 29. cumene |
| 9. ethylacetate | 30. propylbenzene |
| 10. trichloromethane | 31. 1,3,5-trimethylbenzene |
| 11. tetrahydrofuran | 32. decane |
| 12. 1,2-dichloroethane | 33. 1-butylbenzene |
| 13. 1,1,1-trichloroethane | 34. iso-butylbenzene |
| 14. benzene | 35. sec-butylbenzene |
| 15. heptane | 36. p-butylbenzene |
| 16. 1,1,2-trichloroethane | 37. 1,2,3-trimethylbenzene |
| 17. bromodichloromethane | 38. m-diethylbenzene |
| 18. methylisobutylketone | 39. bis-(chloroisopropyl)ether |
| 19. dimethyldisulfide | 40. butylbenzene |
| 20. toluene | 41. 1,2,3,5-tetramethylbenzene |
| 21. octane | 42. 1,2,3,4-tetramethylbenzene |



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This information is subject to change without notice.

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