



Underivatized phenols

Application Note

Environmental

Authors

Agilent Technologies, Inc.

Introduction

Gas chromatography using an Agilent VF-Xms column separates 21 phenols in eight minutes.



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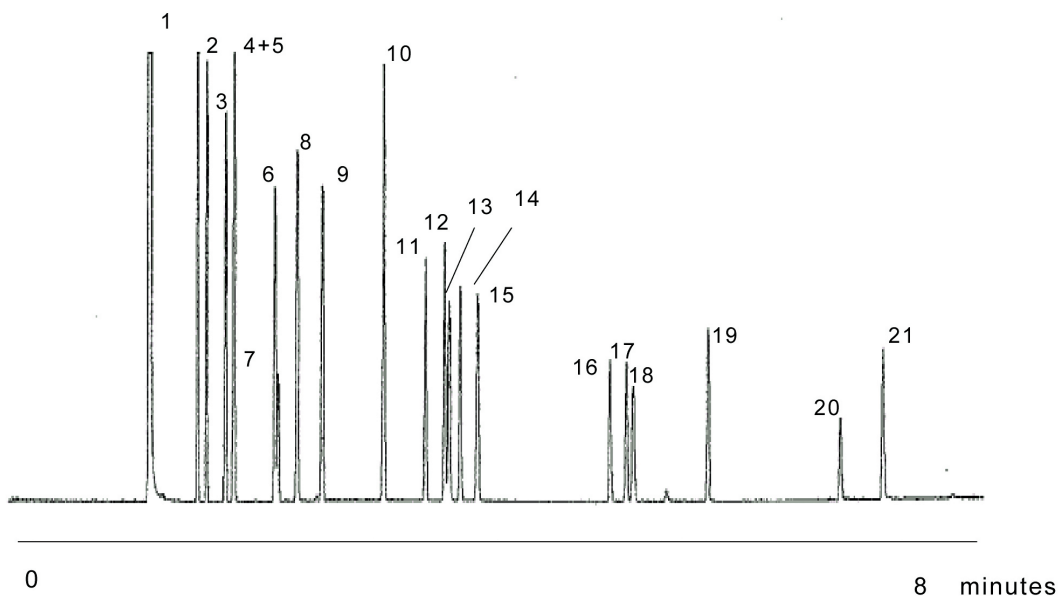
Conditions

Technique : GC
Column : Agilent VF-Xms, 0.25 mm x 30 m fused silica
(df = 0.10 µm) (Part no. CP8805)
Temperature : 100 °C → 230 °C, 10 °C/min
Carrier Gas : Hydrogen, 100 kPa
Injector : Split, T = 275 °C
Detector : FID
Sample Size : 1 µL
Concentration Range : ca. 3 ng per component on the column
Solvent Sample : hexane

Courtesy : J. Peene, Agilent R&D laboratories, Middelburg,
The Netherlands

Peak identification

1. phenol
2. 2-chlorophenol
3. o-cresol
4. m-cresol
5. p-cresol
6. 2,4 dimethylphenol
7. 2-nitrophenol
8. 2,4-dichlorophenol
9. 2,6-dichlorophenol
10. 4-chloro-3-methylphenol
11. 2,3,5-trichlorophenol
12. 2,4,6-trichlorophenol
13. 2,4,5-trichlorophenol
14. 2,3,4-trichlorophenol
15. 2,3,6-trichlorophenol
16. 2,4-dinitrophenol
17. 4-nitrophenol
18. 2,3,5,6-tetrachlorophenol
19. 2-methyl-4,6-dinitrophenol
20. pentachlorophenol
21. 2-sec-butyl-4,6-dinitrophenol
(dinoseb)



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This information is subject to change without notice.

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