



Phenols

Analysis of underivatized phenols

Application Note

Environmental

Authors

Agilent Technologies, Inc.

Introduction

GC analysis of 21 phenols with an Agilent VF-200ms column achieves a separation in 22 minutes.



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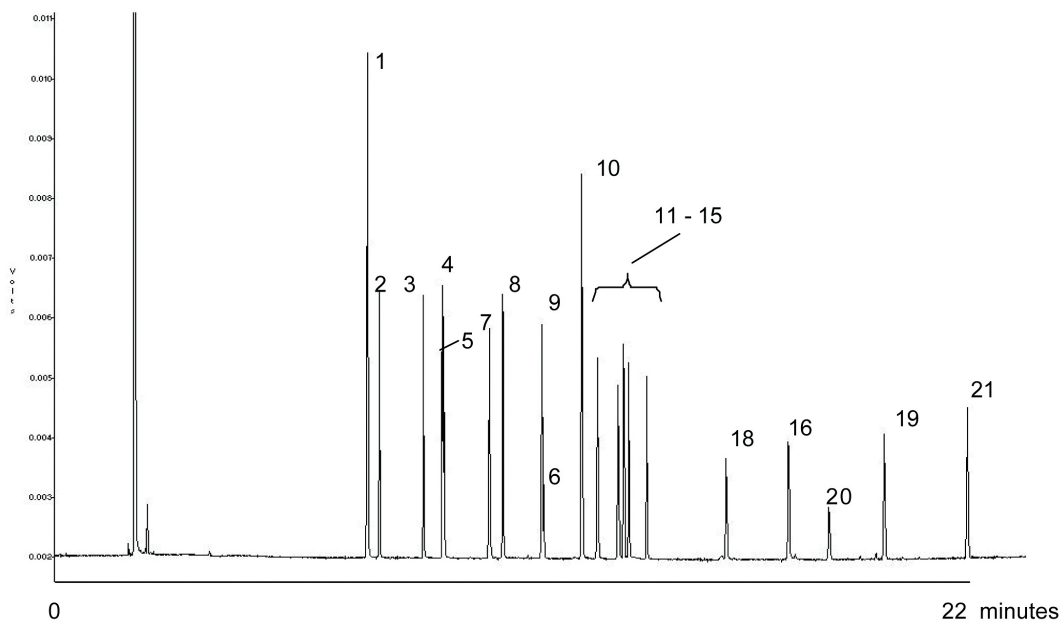
Conditions

Technique : GC
Column : Agilent FactorFour VF-200ms, 0.25 mm x 30 m
(df = 0.25 μ m) (Part no. CP8858)
Temperature : 45 °C, 10 °C/min $\rightarrow$ 325 °C
Carrier Gas : Helium, ca. 1.0 mL/min
Pressure program : 60 kPa
Injector : Split/Splitless, in split mode, 1:100
Detector : FID
Sample Size : 1 μ L
Solvent : methylene chloride, 2000 μ g/mL

Courtesy : Jane Peene, Agilent Application laboratory,
Middelburg, The Netherlands

Peak identification

1. phenol
2. 2-chlorophenol
3. o-cresol
4. m-cresol
5. p-cresol
6. 2-nitrophenol
7. 2,4-dimethylphenol
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. 4-nitrophenol
17. 2,4-dinitrophenol
18. 2,3,5,6-tetrachlorophenol
19. 2-methyl-4,6-dinitrophenol
20. pentachlorophenol
21. 2-sec-butyl-4,6-dinitrophenol



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This information is subject to change without notice.

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