

# Solvents

## Application Note

Materials Testing & Research

### Authors

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### Introduction

For the separation of solvents the Agilent CP-Select 624 CB offers an unique high selectivity. Complex separations of volatile compounds can be achieved in the shortest possible analysis times. The reproducibility of peak elution order of this phase is guaranteed by in-house control of stationary phase composition.



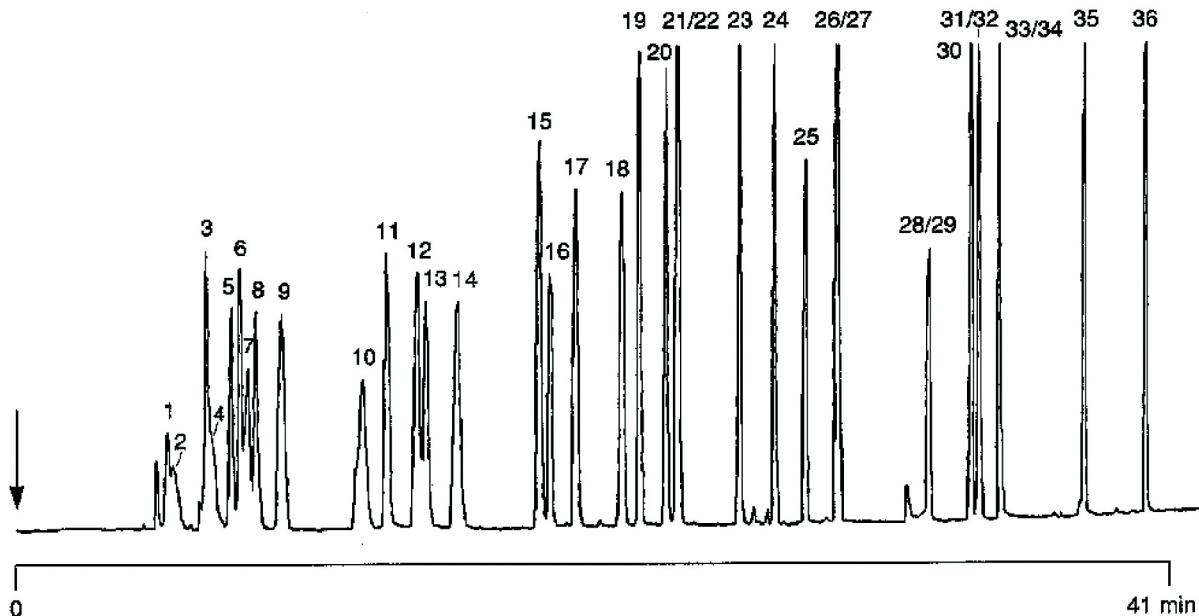
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## Conditions

Technique : GC-capillary  
 Column : Agilent CP-Select 624 CB, 0.25 mm x 30 m fused silica WCOT CP-Select 624 CB (df = 1.4 µm)  
 (Part no. CP7412)  
 Temperature : 40 °C (15 min) → 135 °C, 5 °C/min;  
 135 °C → 190 °C, 10 °C/min  
 Carrier Gas : N<sub>2</sub>, 80 kPa (0.8 bar, 11 psi)  
 Injector : Split, T = 250 °C  
 Detector : T = 300 °C  
 Sample Size : 1 µL  
 Concentration Range : all components at 100 ppm level  
 Solvent Sample : water  
 Courtesy : J. Franken, Alcontrol, the Netherlands

## Peak identification

1. methyl formate
2. methanol
3. diethyl ether
4. ethanol
5. acetone
6. ethyl formate
7. 2-propanol
8. methyl acetate
9. 2-methyl-2-propanol (1-butanol)
10. 1-propanol
11. butyraldehyde
12. 2-butanone (methyl ethyl ketone)
13. ethyl acetate
14. 2-butanol
15. isobutanol
16. isopropyl acetate
17. methyl isopropyl ketone  
(3-methyl-2-butanone)
18. 1-butanol
19. 2-pentanone
20. propyl acetate
21. 3-pentanol
22. 2-pentanol
23. methyl isobutyl ketone
24. isobutyl acetate
25. 1-pentanol
26. mesityloxide
27. butyl acetate
28. N,N-dimethylformamide
29. isoamyl acetate
30. 2-heptanone
31. amyl acetate
32. cydohexanol
33. cydohexanone
34. dimethyl sulfoxide (DMSO)
35. 2-octanol
36. 1-octanol



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This information is subject to change without notice.

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