



# Solvents

## Application Note

BioPharma

### Authors

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### Introduction

Agilent PoraBOND Q is a porous polymer that combines high retention with high inertness. This results in a high separation efficiency for solvents. Compared to chemically bonded phases it has the advantage of a better peak shape and better separation for the more volatile solvents specified by the Pharmacopoeia/USP. The high purity of the PoraBOND Q also results in a maximum temperature of 320 °C making quick bake-out and short analysis times possible. There are no particles present in the PoraBOND Q as the porous layer is chemically bonded, allowing direct valve injections or switching applications.



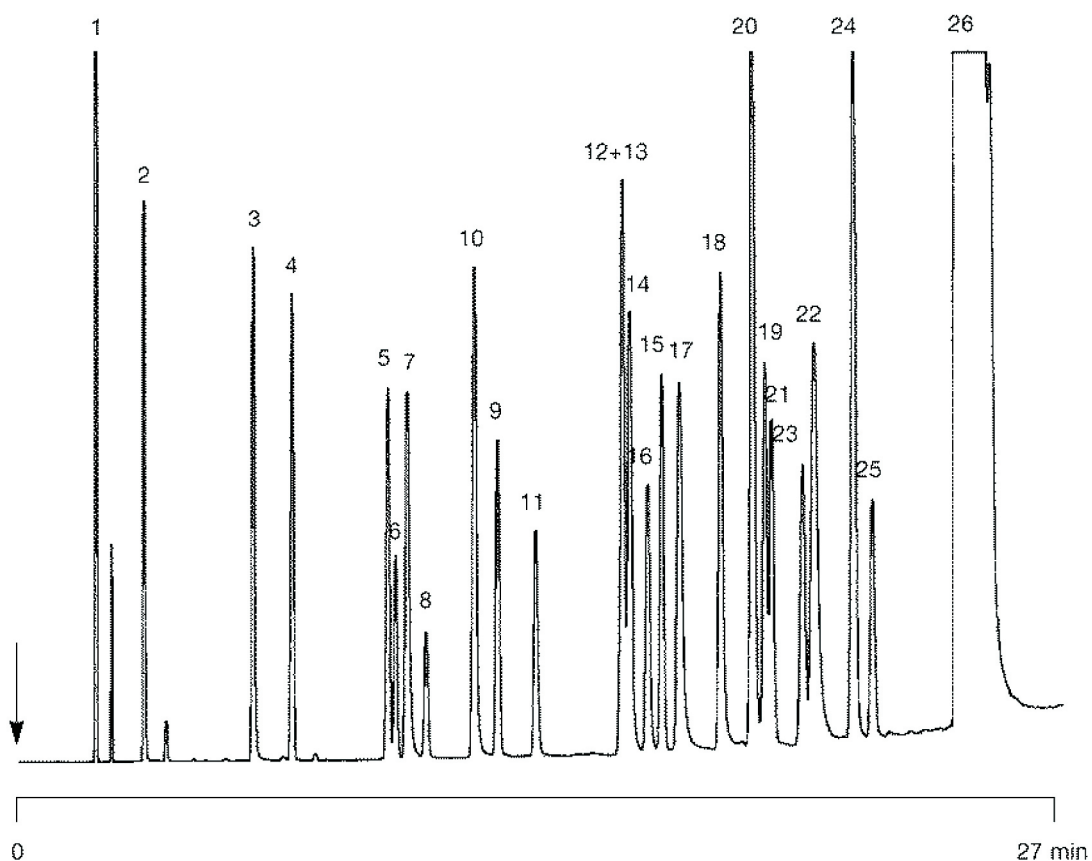
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## Conditions

Technique : GC-wide-bore  
Column : Agilent PoraBOND Q, 0.53 mm x 25 m fused silica  
PLOT (df = 10  $\mu$ m) (Part no. CP7354)  
Temperature : 100 °C (2 min)  $\rightarrow$  300 °C. 5 °C/min  
Carrier Gas : He, 25 kPa (0.25 bar, 3.5 psi)  
Injector : Split, T = 250 °C  
Detector : FID, T = 250 °C  
Sample Size : 0.5  $\mu$ L  
Concentration Range : 0.1% per compound  
Solvent Sample : DMSO

## Peak identification

1. methane
2. methanol
3. ethanol
4. acetonitrile
5. acetone
6. dichloromethane
7. 2-propanol (isopropanol)
8. dimethyl sulfide
9. diethyl ether
10. 1-propanol
11. pentane
12. 2-butanone
13. trichloromethane
14. tetrahydrofuran
15. ethyl acetate
16. 2-methoxyethanol
17. isobutanol
18. butanol
19. hexane
20. benzene
21. trichloroethylene
22. cyclohexane
23. 1,4-dioxane
24. pyridine
25. N,N-dimethylformamide
26. dimethyl sulfoxide



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This information is subject to change without notice.

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