

Pesticides

Highly selective trace analysis of pesticides

Application Note

Environmental

Authors

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Introduction

Trace analysis of pesticides in surface water, has to be done before intake in a drinking water fabrication plant. The phenyl/methyl siloxane phase is an excellent, slightly polar confirmation column to be used in combination with an apolar stationary phase. The Agilent CP-Sil 24 CB Low Bleed/MS is a very interesting column in combination with ITD because of its low bleed levels.



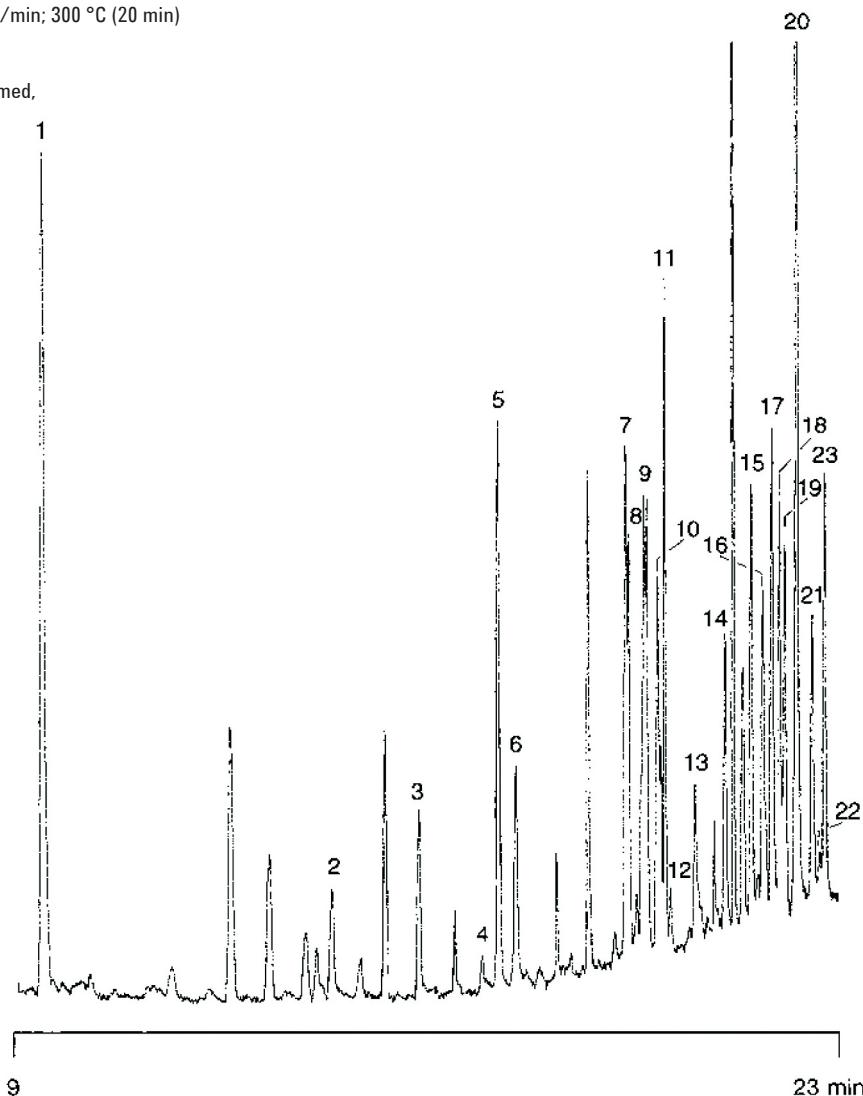
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Conditions

Technique : GC-capillary
Column : Agilent CP-Sil 24 CB Low Bleed/MS, 0.25 mm x 30 m fused silica WCOT (df = 0.25 µm) (Part no. CP5817)
Temperature : 80 °C (3.5 min) → 150 °C, 20 °C/min
150 °C (5 min) → 300 °C, 10 °C/min; 300 °C (20 min)
Carrier Gas : He, 1 mL/min
Injector : Splitless, temperature programmed,
T = 80 - 280 °C
Detector : MS-ITD
T = 300 °C
Sample Size : 1 µL
Concentration Range : 0.2 ng/µL
Solvent Sample : isoctane

Peak identification

1. dichlorphos
2. mevinphos
3. trifluralin
4. demeton-s
5. heptenophos
6. ethoprophos
7. diazinon
8. propazine
9. atrazine
10. terbutylazine
11. simazine
12. disulfoton
13. dimethoate
14. primicarb
15. prometryn
16. tolclofos-methyl
17. terbutryn
18. chlorpyriphos
19. malathion
20. fenitrothion
21. carbaryl
22. fenthion
23. chlorgenvinphos



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