

Application Report 26

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Raw Data File Name:

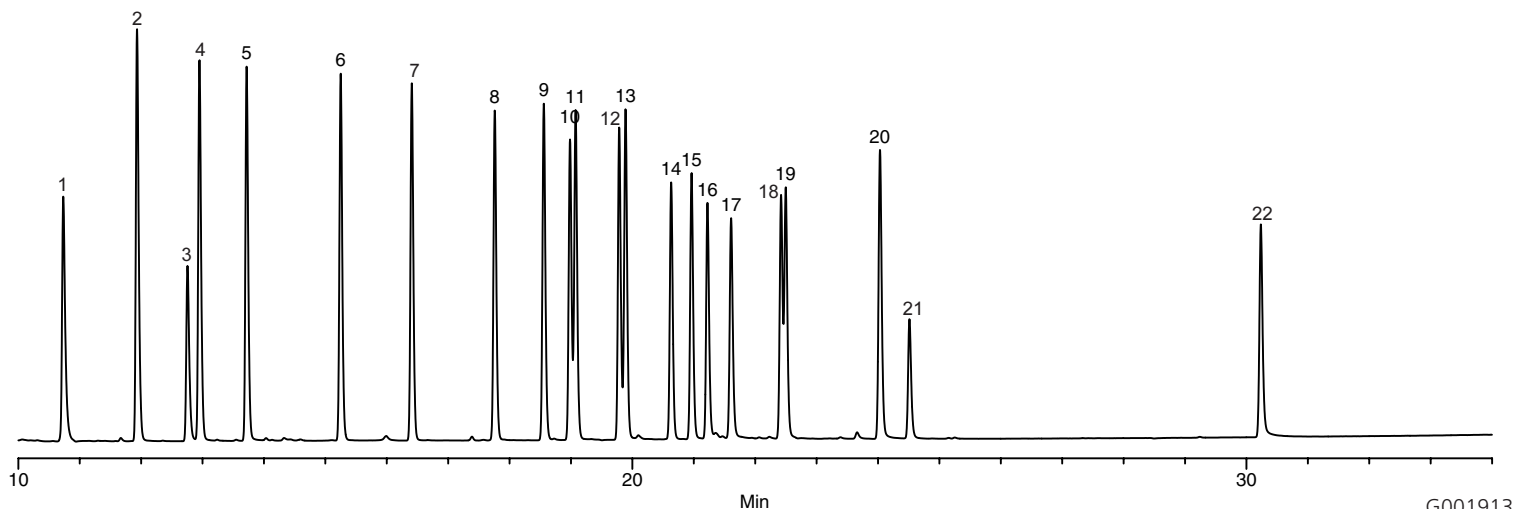
Acquisition System: GC1777

US EPA Method 8081 Chlorinated Pesticides on Equity-5

The potential health effects associated with many chlorinated pesticides has led to regulations regarding their use. US EPA method 8081 describes the GC/ECD analysis of these compounds, and recommends a 5% phenyl methylpolysiloxane-type capillary for use as a primary column. In this application, 20 commonly analyzed pesticides and 2 surrogate compounds were separated on the Equity-5 column. The column offered excellent peak shape and resolution. The stable baseline and low bleed, made it suitable for GC/ECD use.

Key Words

Chlorinated pesticides, method 8081, Equity, 28089-U, 46845-U



G001913

Conditions

Column: Equity-5, 30m x 0.25mm ID, 0.25 μ m
Cat. No.: 28089-U
Oven: 100°C (2 min) to 160°C @ 15°C/min to 300°C @ 5°C/min (10 min)
Inj.: 225°C
Det.: ECD, 310°C
Flow: Helium, constant flow, 30cm/sec @ 100°C
Injection: 2 μ L, splitless (0.5 min)
Liner: 4mm ID double taper
Sample: 50ppb each of a 22 component chlorinated pesticide standard (Cat. No. 46845-U)

Peak IDs

1. 2,4,5,6-Tetrachloro-m-xylene (surr.)
2. α -BHC
3. β -BHC
4. γ -BHC
5. δ -BHC
6. Heptachlor
7. Aldrin
8. Heptachlor epoxide
9. γ -Chlordane
10. Endosulfan I
11. α -Chlordane
12. 4,4'-DDE
13. Dieldrin
14. Endrin
15. Endosulfan II
16. 4,4'-DDD
17. Endrin aldehyde
18. Endosulfan sulfate
19. 4,4'-DDT
20. Endrin ketone
21. Methoxychlor
22. Decachlorobiphenyl (surr.)