

Application Report 389

US EPA Method 608, 8081, OLM04.2 Organochlorine Pesticides on the SLB-5ms

This is the analysis of a 22-component standard containing 20 pesticides and 2 surrogate compounds commonly analyzed by US EPA Method 8081. The SLB-5ms exhibited an extremely stable baseline over the entire analysis. The SLB-5ms can be taken to a maximum isothermal hold temperature of 340 °C, however a final analysis temperature of 300 °C was used for this application. This was done to allow the SLB-5ms to be used for dual column analysis in the same GC oven with a second column that may have a lower maximum operating temperature.

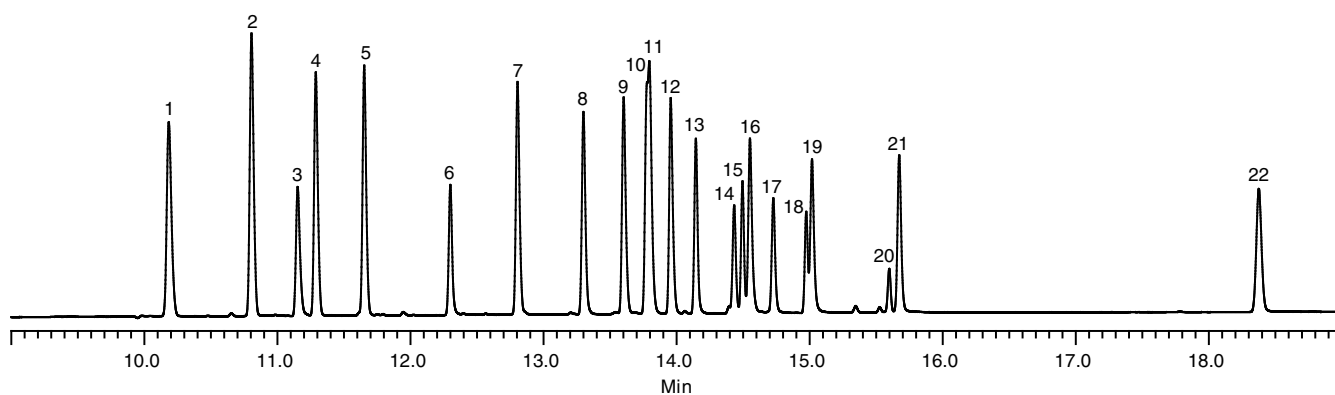
Key Words

organochlorine pesticides, US EPA Method 8081, SLB-5ms, 46845-U, 28471-U

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Acquisition System: 6249

Notebook Reference: 1569-015



G003531

Conditions

column: SLB-5ms, 30 m x 0.25 mm I.D., 0.25 μ m (28471-U)
oven: 100 °C (2 min.), 15 °C/min. to 300 °C (5 min.)
inj.: 250 °C
det.: ECD, 300 °C
carrier gas: helium, 0.9 mL/min, constant flow
injection: 2.0 μ L, splitless (0.75 min.)
liner: 4 mm I.D., single taper
sample: chlorinated pesticide standard (46845-U), diluted to 50 ppb in n-hexane

Peak IDs

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