



# Chlorinated pesticides

## Analysis of EPA 625 pesticides with direct injection

### Application Note

Environmental

#### Authors

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#### Introduction

For the analysis of trace halogenated pesticides, very often the on-column injection technique is used because in hot injection ports discrimination, adsorption or decomposition can occur. Best columns for on column injection are the 0.53 mm and 0.32 mm id capillary columns because the inside diameter of the capillary is easily accessed by the syringe needles used for on-column injection. Also, high flow rates are easily obtained resulting in low elution temperatures.



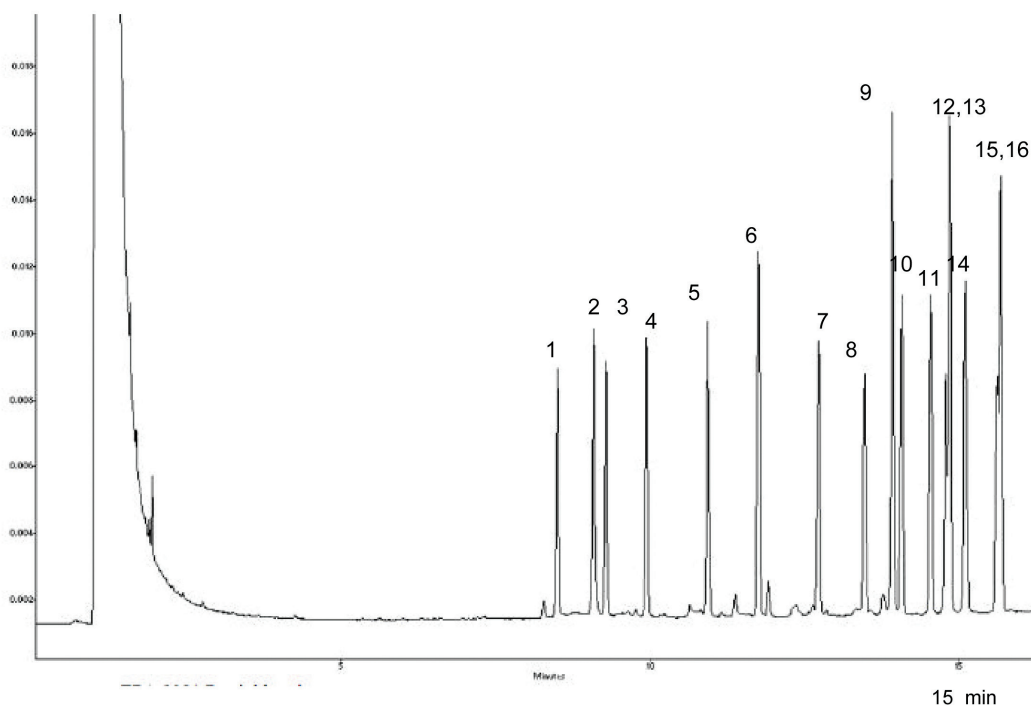
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## Conditions

Technique : GC  
Column : Agilent VF-5ms, 0.53 mm x 30 m fused silica  
(df = 0.5  $\mu$ m) (Part No. CP8974)  
Temperature : 120 °C, 1 min  $\rightarrow$  300 °C, 9 °C/min  
Carrier Gas : Helium, 50 cm/s  
Detector : FID  
T = 300 °C  
Injector : Direct, 2  $\mu$ L  
Concentration Range : 200 pg / $\mu$ L

## Peak identification

1.  $\alpha$ -BHC
2.  $\beta$ -BHC
3. delta-BHC
4. gamma-BHC (lindane)
5. heptachlor
6. aldrin
7. heptachlorepoxyde
8. endosulfan
9. 4,4'-DDD
10. dieldrin
11. endrin
12. 4,4'-DDD
13. endosulfan II
14. endrin aldehyde
15. 4,4'-DDT
16. endosulfan sulfat



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