

Application Note

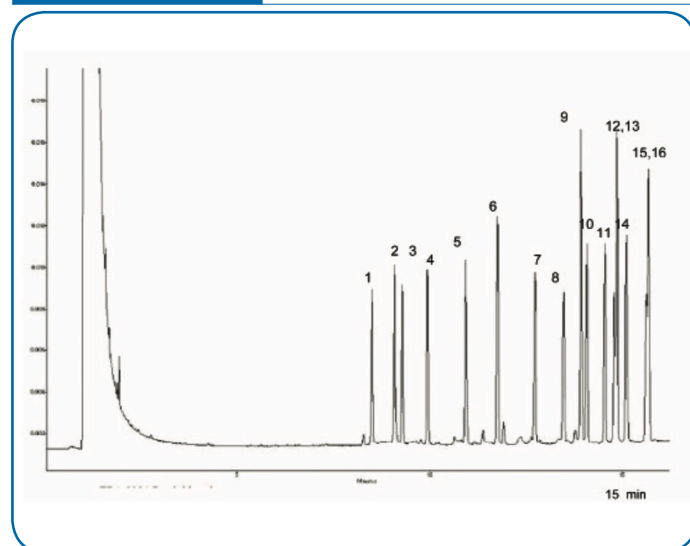
Environmental

Chlorinated pesticides Analysis of EPA 625 pesticides using direct injection

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 may be used.



Conditions	
Technique	GC - FID
Column	SCION-Pesticides, 0.25 mm x 60 m, df = 2.5 µm (Part no. SC37423)
Temperature	120 °C, 1 min → 300 °C, 9 °C/min
Carrier Gas	Helium, 50 cm/s
Injector	Direct, 2 µL
Detector	FID T = 300 °C
Concentration Range	200 µg / µL



Peak Identification			
1	α-BHC	12	endrin
2	β-BHC	13	endosulfan II
3	delta-BHC	14	endrin aldehyde
4	gamma-BHC (lindane)	15	4,4'-DDT
5	heptachlor	16	endosulfan sulfate
6	aldrin		
7	heptachlorepoxide		
8	endosulfan		
9	4,4'-DDD		