

OPTIMA® · medium polar capillary columns



OPTIMA® 1301 6 % cyanopropyl-phenyl – 94 % dimethylpolysiloxane · USP G43



Key features

- Midpolar phase
- Structure see page 315



Recommended application

- Pesticide analysis
- For corresponding columns with higher film thickness see OPTIMA® 624



Temperature

- T_{max} 300 °C (long-term temperature), T_{max} 320 °C (short-term max. temperature in a temperature program)

Similar phases

- HP-1301, DB-1301, SPB™-1301, Rtx®-1301, CP-1301, 007-1301

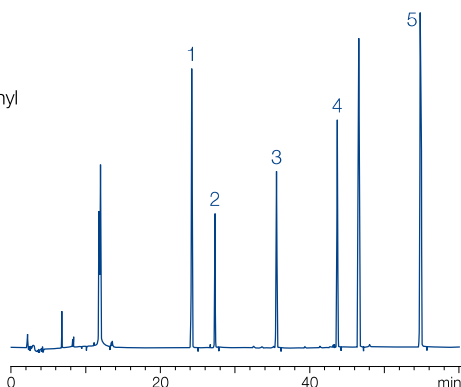
Analysis of a pesticide mixture

MN Appl. No. 210620

Column: OPTIMA® 1301, 60 m x 0.25 mm ID, 0.25 µm film
Injection: 3 µL (0.1 ng/µL), 80 °C (1 min) → 250 °C (1 min) pulsed splitless
Carrier gas: He, 54 mL/min
Temperature: 80 °C (2 min) → 190 °C, 20 °C/min (12 min) → 240 °C, 2 °C/min (23 min) → 260 °C, 10 °C/min (20 min)
Detector: ECD

Peaks :

- Propyzamide
- Vinclozolin
- Bromophos-ethyl
- 2,4-DDT
- Bromopropylate



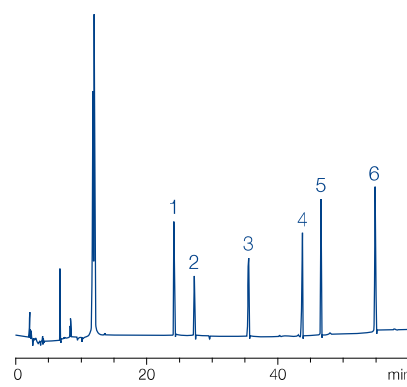
Analysis of a PCB mixture

MN Appl. No. 210650

Column: OPTIMA® 1301, 60 m x 0.25 mm ID, 0.25 µm film
Injection: 3 µL (0.1 ng/µL), 80 °C (1 min) → 250 °C (1 min) pulsed splitless
Carrier gas: He, 54 mL/min
Temperature: 80 °C (2 min) → 190 °C, 20 °C/min (12 min) → 240 °C, 2 °C/min (23 min) → 260 °C, 10 °C/min (20 min)
Detector: ECD

Peaks :

- PCB-28
- PCB-52
- PCB-128
- PCB-153
- PCB-138
- PCB-180



OPTIMA® 1301

	Length → 25 m	30 m	50 m	60 m
0.25 mm ID (0.4 mm OD)				
0.25 µm film	726771.25	726771.30	726771.50	726771.60
0.32 mm ID (0.5 mm OD)				
0.25 µm film	726777.25	726777.30		726777.60
1.00 µm film		726780.30	726780.50	726780.60
0.53 mm ID (0.8 mm OD)				
1.00 µm film	726783.25			

In addition to this standard program we will be happy to supply columns custom-made to your specifications. Information about scope of delivery, special cages and integrated guard columns see additional information for GC columns on page 311.

Further applications can be found online in our application database at ChromaAppDB.mn-net.com