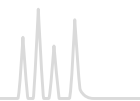




OPTIMA® · nonpolar capillary columns



OPTIMA® 1 MS 100 % dimethylpolysiloxane · USP G1 / G2 / G38



Key features

- Selectivity identical to OPTIMA® 1,
- Phase with low bleeding
- Structure see page 315



Recommended application

- GC/MS and ECD, general analysis at trace level



Temperature

- T_{max} 340 °C (long-term temperature),
T_{max} 360 °C (short-term max. temperature in a temperature program)

Similar phases

- Ultra-1, DB-1MS, HP-1MS, Rxi®-1MS, Rtx®-1MS, Equity™-1, AT™-1MS, VF-1MS, CP-Sil 5 CB MS

OPTIMA® 1 MS

Length → 12 m	15 m	25 m	30 m	50 m	60 m
0.2 mm ID (0.4 mm OD)					
0.20 µm film		726201.25		726201.50	
0.35 µm film	726203.12				
0.25 mm ID (0.4 mm OD)					
0.25 µm film	726205.15		726205.30		726205.60
0.32 mm ID (0.5 mm OD)					
0.25 µm film			726202.30		726202.60

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.

OPTIMA® 1 MS Accent 100 % dimethylpolysiloxane · USP G1 / G2 / G38



Key features

- Selectivity identical to OPTIMA® 1,
- Nonpolar phase
- Lowest column bleed
- Solvent rinsing for removal of impurities applicable
- Increased sensitivity due to an unmatched low background level
- Structure see page 315



Recommended application

- Ideal for ion trap and quadrupole MS detectors
- Perfect inertness for basic compounds
- All-round phase for environmental analysis, trace analysis, EPA methods, pesticides, PCB, food and drug analysis

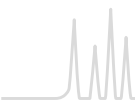


Temperature

- T_{max} 340 °C (long-term temperature),
T_{max} 360 °C (short-term max. temperature in a temperature program)

Similar phases

- Ultra-1, DB-1MS, HP-1MS, Rxi®-1MS, Rtx®-1MS, Equity™-1, AT™-1MS, VF-1MS, CP-Sil 5 CB MS



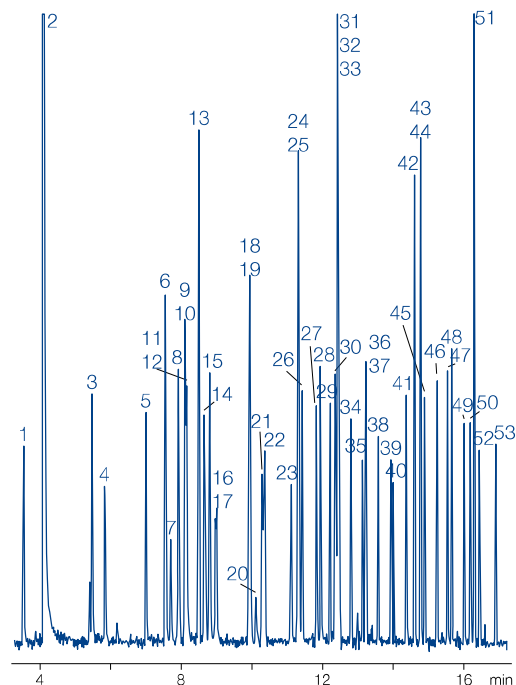
EPA 8140/8141/8141 A Organophosphorus pesticides

MN Appl. No. 213030

Column: OPTIMA® 1 MS Accent, 30 m x 0.32 mm ID, 0.50 µm film
Sample: 0.2 µg/mL in hexane,
8140/8141 OP pesticides calibration mix A
and 8141 OP pesticides calibration mix B;
IS triphenyl phosphate and tributyl phosphate
Injection: 250 °C, splitless (hold 1 min)
Carrier gas: He, 1 mL/min, constant pressure
Temperature: 100 °C → 180 °C, 10 °C/min (2 min) → 300 °C, 18 °C/min (3 min)
Detector: FPD (Flame Photometric Detector), 280 °C

Peaks:

1. Dichlorvos	19. Fonophos	38. Stirofos
2. Hexamethylphospho- ramide	20. Phosphamidon isomer	39. Tokuthion
3. Mevinphos	21. Diazinon	40. Merphos oxidation product
4. Trichlorfon	22. Disulfoton	41. Fensulfothion
5. TEPP	23. Phosphamidon	42. Famphur
6. Thionazin	24. Dichlorofenthion	43. Ethion
7. Demeton-O	25. Parathion-methyl	44. Bolstar
8. Ethoprop	26. Chlorpyrifos-methyl	45. Carbophenothion
9. Tributyl phosphate (IS)	27. Ronnel	46. Triphenyl phosphate (IS)
10. Dicrotophos	28. Fenitrothion	47. Phosmet
11. Monocrotophos	29. Malathion	48. EPN
12. Naled	30. Fenthion	49. Azinphos-methyl
13. Sulfotepp	31. Aspon	50. Leptophos
14. Phorate	32. Parathion-ethyl	51. Tri-o-cresyl phosphate
15. Dimethoate	33. Chlorpyrifos	52. Azinphos-ethyl
16. Demeton-S	34. Trichloronate	53. Coumaphos
17. Dioxathion	35. Chlorfenvinphos	
18. Terbufos	36. Merphos	
	37. Crotoxyphos	



OPTIMA® 1 MS Accent

	Length → 15 m	25 m	30 m	50 m	60 m
0.2 mm ID (0.4 mm OD)					
0.20 µm film		725801.25		725801.50	
0.25 mm ID (0.4 mm OD)					
0.25 µm film	725805.15		725805.30		725805.60
0.50 µm film			725806.30		725806.60
0.32 mm ID (0.5 mm OD)					
0.25 µm film			725802.30		725802.60
0.50 µm film			725807.30		725807.60

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.