

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



### Key features

- Chemically bonded, cross-linked silarylene phase with selectivity similar to 6 % cyanopropyl-phenyl – 94 % dimethylpolysiloxane, symmetric substituted cyanopropylsilanes and integrated phenyl rings (silarylene)
- Midpolar phase with very low bleed
- Perfect deactivation
- Structure see page 315

### Similar phases

- VF-1301ms, Rxi®-1301Sil MS, TG-1301MS



### Recommended application

- Specially suitable for sophisticated environmental analysis (e.g., EPA methods for PAHs, PCBs and pesticides)
- 100 % ion trap and quadrupole MS compatibility



### Temperature

- T<sub>max</sub> 300 °C (long-term temperature), T<sub>max</sub> 320 °C (short-term max. temperature in a temperature program)

## OPTIMA® 1301 MS

|                               | Length →<br>30 m | 60 m      |
|-------------------------------|------------------|-----------|
| <b>0.25 mm ID (0.4 mm OD)</b> |                  |           |
| 0.25 µm film                  | 726640.30        | 726640.60 |
| <b>0.32 mm ID (0.5 mm OD)</b> |                  |           |
| 0.25 µm film                  | 726641.30        | 726641.60 |
| 1.00 µm film                  | 726642.30        | 726642.60 |
| <b>0.53 mm ID (0.8 mm OD)</b> |                  |           |
| 1.00 µm film                  | 726643.30        | 726643.60 |

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® 624 6 % cyanopropyl-phenyl – 94 % dimethylpolysiloxane · USP G43



### Key features

- Midpolar phase
- Structure see page 315



### Recommended application

- Environmental analysis
- For corresponding columns with lower film thickness see OPTIMA® 1301

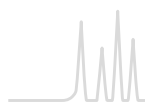


### Temperature

- T<sub>max</sub> 280 °C (long-term temperature), T<sub>max</sub> 300 °C (short-term max. temperature in a temperature program)

### Similar phases

- HP-624, HP-VOC, DB-624, DB-VRX, SPB™-624, CP-624, Rtx®-624, Rtx®-Volatiles, 007-624, BP624, VOCOL



## OPTIMA® 624 LB 6 % cyanopropyl-phenyl – 94 % dimethylpolysiloxane

### ★ Key features

- Midpolar phase with low bleeding
- Structure see page 315

### ✓ Recommended application

- Halogenated hydrocarbons, volatiles, aromatic compounds, solvents etc.

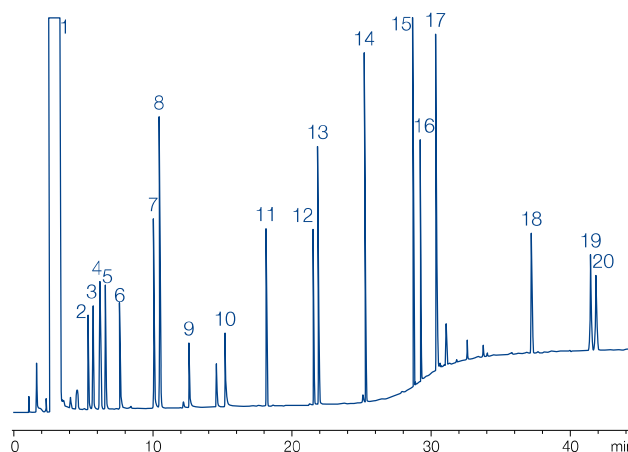
#### Solvents and semi-volatiles

MN Appl. No. 212520

Column: OPTIMA® 624 LB, 30 m x 0.32 mm ID, 1.8 µm film; retention gap Phe-Sil 0.5 m x 0.53 mm  
Injection: 1 µL (10 ppm per substance in acetone), cold on-column  
Carrier gas: 1.1 bar He  
Temperature: 45 °C (3 min) → 150 °C (6 °C/min) → 300 °C (18 °C/min), 20 min 300 °C  
Detector: FID 280 °C

#### Peaks:

- |                       |                                       |
|-----------------------|---------------------------------------|
| 1. Acetone            | 11. Decane                            |
| 2. Ethyl acetate      | 12. 1-Octanol                         |
| 3. Tetrahydrofuran    | 13. Acetophenone                      |
| 4. Cyclohexane        | 14. Butyrophenone                     |
| 5. 2-Methyl-2-butanol | 15. Heptanophenone                    |
| 6. 1-Butanol          | 16. 5-Methoxyindole                   |
| 7. Pyridine           | 17. Dibenzylamine                     |
| 8. Toluene            | 18. Methyl eicosanoate                |
| 9. Dimethylformamide  | 19. Methyl <i>cis</i> -13-docosenoate |
| 10. Dimethylsulfoxide | 20. Methyl docosanoate                |



## OPTIMA® 624

|                        | Length →  |           |           |           |
|------------------------|-----------|-----------|-----------|-----------|
|                        | 25 m      | 30 m      | 50 m      | 60 m      |
| 0.2 mm ID (0.4 mm OD)  |           |           |           |           |
| 1.10 µm film           | 726784.25 |           |           |           |
| 0.25 mm ID (0.4 mm OD) |           |           |           |           |
| 1.40 µm film           | 726785.25 | 726785.30 | 726785.50 | 726785.60 |
| 0.32 mm ID (0.5 mm OD) |           |           |           |           |
| 1.80 µm film           | 726787.25 | 726787.30 | 726787.50 | 726787.60 |
| 0.53 mm ID (0.8 mm OD) |           |           |           |           |
| 3.00 µm film           | 726789.25 | 726789.30 |           |           |

## OPTIMA® 624 LB

|                        | Length → |           |           |
|------------------------|----------|-----------|-----------|
|                        | 25 m     | 30 m      | 50 m      |
| 0.32 mm ID (0.5 mm OD) |          |           |           |
| 1.80 µm film           |          | 726786.30 | 726786.50 |

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