

Product Information

General Purpose Polar Capillary GC Columns

When to Use a General Purpose Column

Supelco's general purpose columns are ideal when the application does not demand the low bleed, selectivity, and high efficiency that our special purpose columns provide. Using a general purpose column may be a cost-effective way to perform preliminary investigations.

When to Use a Polar Column

If unable to separate all compounds of interest on a non-polar column, try running the analysis on a polar column. A polar column will often resolve critical polar compound pairs that will not separate by boiling point alone.

Column Choices

SPB™-225: The mixed functionality, 50% cyanopropylphenyl, provides unique elution order characteristics relative to other polar phases.

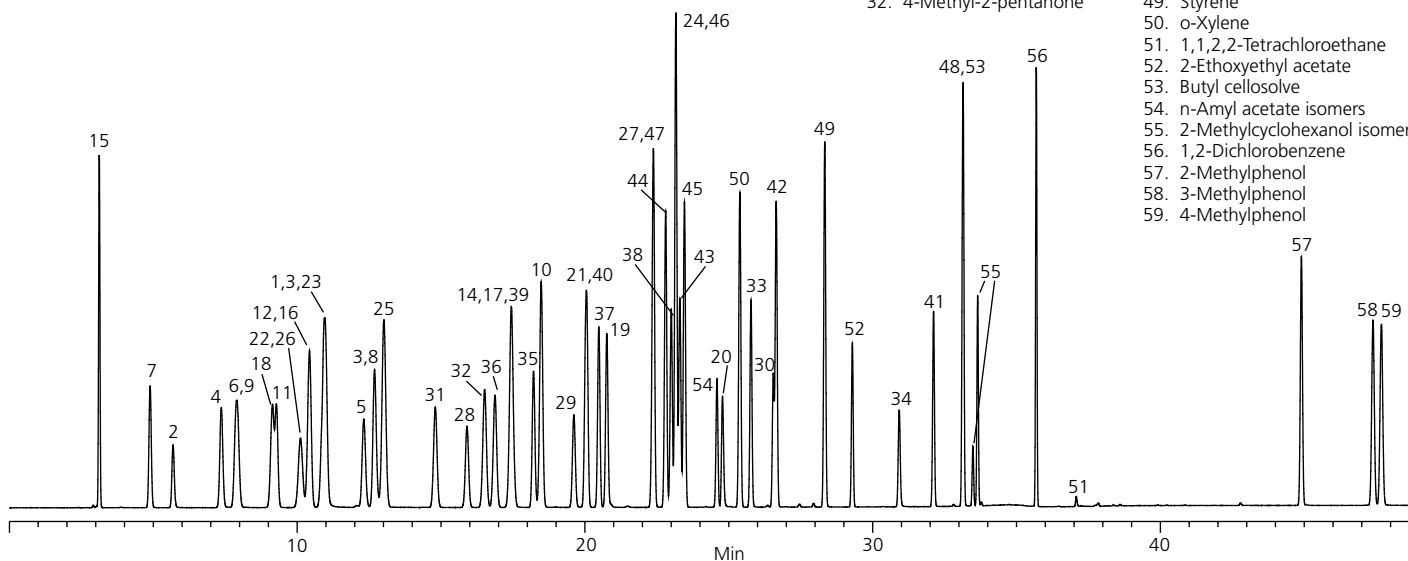
PAG: Less polar than polyethylene glycol phases due to the incorporation of propylene oxide into the polymer backbone, these columns fill the polarity gap between 50% phenyl phases and WAX phases.

SUPELCOWAX™ 10: This column is the bonded equivalent to the Carbowax® 20M phase, with much higher thermal stability. Because this phase offers polarity higher than any of the phenyl polymethylsiloxane phases, it is widely used for separation and purity analyses of many polar compounds, including alcohols, aromatics, flavors, fragrances, and FAMES.

Industrial Solvents on SUPELCOWAX 10

column: SUPELCOWAX 10, 30 m x 0.32 mm I.D., 1.0 µm (24211)
 oven: 35 °C (8 min.), 4 °C/min. to 130 °C (2 min.)
 inj.: 250 °C
 det.: FID, 250 °C
 carrier gas: helium, 25 cm/sec. constant @ 35 °C
 injection: 0.5 µL, split 200:1
 liner: split, cup design
 sample: 59 component neat solvent mixture

- | | | |
|--------------------------------|-----------------------------------|----------------------------------|
| 1. Methanol | 17. Chloroform | 33. Isoamyl alcohol |
| 2. Methyl formate | 18. Tetrahydrofuran | 34. Dimethylformamide |
| 3. Ethanol | 19. Isobutanol | 35. Toluene |
| 4. Acetone | 20. 2-Methoxyethanol | 36. Isobutyl acetate |
| 5. 2-Propanol | 21. 1,2-Dichloroethane | 37. 2-Hexanone |
| 6. Ethyl formate | 22. 1,1,1-Trichloroethane | 38. Mesityl oxide |
| 7. 1,1-Dichloroethylene | 23. Isopropyl acetate | 39. Tetrachloroethene |
| 8. Methylene chloride | 24. n-Butanol | 40. n-Butyl acetate |
| 9. Methyl acetate | 25. Benzene | 41. Diacetone alcohol |
| 10. 1-Propanol | 26. Carbon tetrachloride | 42. Chlorobenzene |
| 11. trans-1,2-Dichloroethylene | 27. 2-Nitropropane | 43. 5-Methyl-2-hexanone |
| 12. 1,1-Dichloroethane | 28. Trichloroethylene | 44. Ethyl benzene |
| 13. 2-Butanone | 29. 1,4-Dioxane | 45. m-Xylene |
| 14. sec-Butanol | 30. 2-Ethoxyethanol (Cellosolve®) | 46. p-Xylene |
| 15. Hexane | 31. n-Propyl acetate | 47. Isoamyl acetate |
| 16. Ethyl acetate | 32. 4-Methyl-2-pentanone | 48. Cyclohexanol |
| | | 49. Styrene |
| | | 50. o-Xylene |
| | | 51. 1,1,2,2-Tetrachloroethane |
| | | 52. 2-Ethoxyethyl acetate |
| | | 53. Butyl cellosolve |
| | | 54. n-Amyl acetate isomers |
| | | 55. 2-Methylcyclohexanol isomers |
| | | 56. 1,2-Dichlorobenzene |
| | | 57. 2-Methylphenol |
| | | 58. 3-Methylphenol |
| | | 59. 4-Methylphenol |



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General Purpose Capillary Columns Offer...

- individual testing for efficiency, inertness, and retention
- a report showing the column performance before it left Supelco
- compact foam lined packaging that takes up less shelf space and protects the column during shipping and storage
- a compact, specially designed cage that minimizes column wear and fits better in newer, smaller ovens

SPB-225

Phase: bonded; (50% cyanopropylphenyl) methylpolysiloxane
Temp. Limits: 45 °C to 220/240 °C

Length (m)	D _f (µm)	Beta	Cat. No.
0.25 mm I.D. Fused Silica			
30	0.15	417	24334
15	0.25	250	23329-U
30	0.25	250	24335
0.32 mm I.D. Fused Silica			
30	0.15	533	24336
30	0.25	320	24337

PAG

Phase: bonded; poly(alkylene glycol)
Temp. Limits: 30 °C to 220 °C

Length (m)	D _f (µm)	Beta	Cat. No.
0.25 mm I.D. Fused Silica			
15	0.25	250	24222-U
30	0.25	250	24223
0.32 mm I.D. Fused Silica			
30	0.25	320	24226
0.53 mm I.D. Fused Silica			
15	0.50	265	25422-U
30	0.50	265	25423-U
60	0.50	265	25424

SUPELLOWAX 10

Phase: bonded; Carbowax 20M poly(ethylene glycol)
Temp. Limits: 35 °C to 280 °C

Length (m)	D _f (µm)	Beta	Cat. No.
0.10 mm I.D. Fused Silica			
5	0.10	250	25025-U
10	0.10	250	25026-U
15	0.10	250	24343
0.20 mm I.D. Fused Silica			
30	0.20	250	24169
60	0.20	250	24170
0.25 mm I.D. Fused Silica			
15	0.25	250	24077
30	0.25	250	24079
60	0.25	250	24081
100	0.25	250	23308-U
30	0.50	125	24284
60	0.50	125	24285-U
0.32 mm I.D. Fused Silica			
15	0.25	320	24078
30	0.25	320	24080-U
60	0.25	320	24082
15	0.50	160	24083
30	0.50	160	24084
60	0.50	160	24085-U
30	1.0	80	24211
60	1.0	80	24212
0.53 mm I.D. Fused Silica			
15	0.50	265	25324
30	0.50	265	25325
60	0.50	265	25385
15	1.0	133	25300-U
30	1.0	133	25301-U
60	1.0	133	25391
30	2.0	63	25375-U
60	2.0	63	25376
0.75 mm I.D. Fused Silica			
30	1.0	188	23327-U

For expert answers to your questions contact our
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