

Product Information

General Purpose Intermediate Polarity 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 an Intermediate Polarity Column

If unable to separate critical compounds after trying non-polar and polar columns, the next step is to run the analysis on an intermediate polarity column. Intermediate polarity columns offer unique polarities that may separate critical compounds.

Column Choices

SPB™-20: The phenyl content, 20%, produces different elution order for polar compounds, making these columns ideal for providing confirmational identification.

SPB-35: The higher phenyl content, 35%, is useful for analyses of polar compounds, because these compounds are retained longer relative to non-polar compounds.

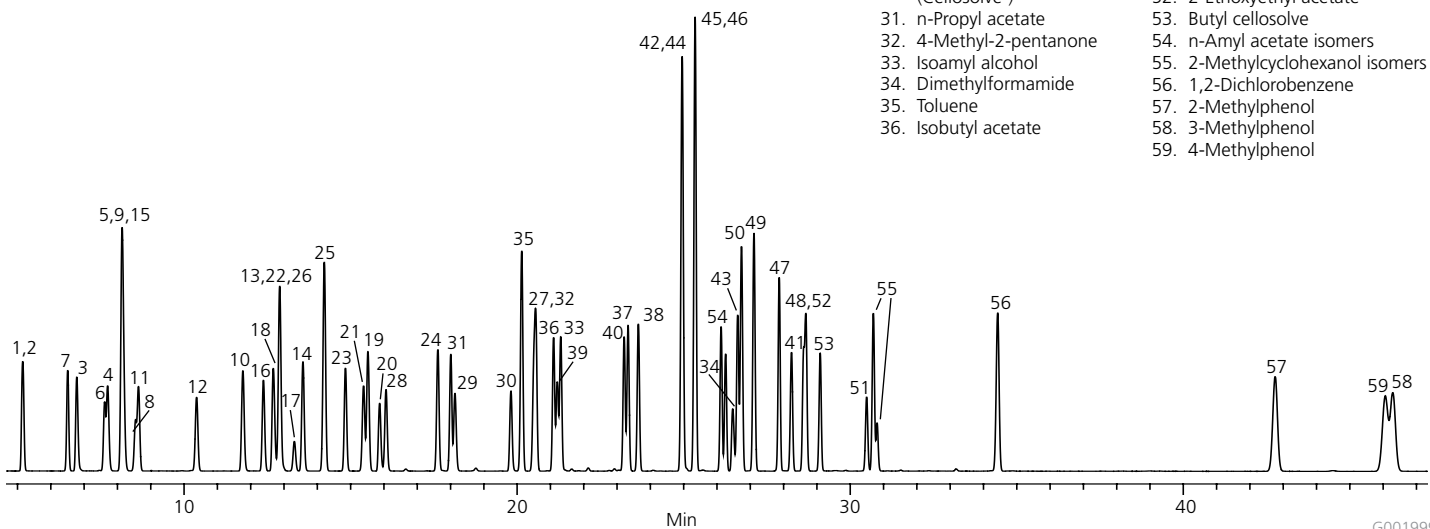
Equity™-1701: The mixed functionality, 14% cyanopropylphenyl, provides unique elution order characteristics relative to phenyl polymethylsiloxane phases.

SPB-50: These columns have the highest phenyl content, 50%, of the common phenyl-containing series of phases, making these columns useful for analyses of polar materials and providing confirmational information.

Common Industrial Solvents Analysis on Equity-1701

column: Equity-1701, 30 m x 0.32 mm I.D., 1.0 µm (28199-U)
 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 | 16. Ethyl acetate | 37. 2-Hexanone |
| 2. Methyl formate | 17. Chloroform | 38. Mesityl oxide |
| 3. Ethanol | 18. Tetrahydrofuran | 39. Tetrachloroethene |
| 4. Acetone | 19. Isobutanol | 40. n-Butyl acetate |
| 5. 2-Propanol | 20. 2-Methoxyethanol | 41. Diacetone alcohol |
| 6. Ethyl formate | 21. 1,2-Dichloroethane | 42. Chlorobenzene |
| 7. 1,1-Dichloroethylene | 22. 1,1,1-Trichloroethane | 43. 5-Methyl-2-hexanone |
| 8. Methylene chloride | 23. Isopropyl acetate | 44. Ethyl benzene |
| 9. Methyl acetate | 24. n-Butanol | 45. m-Xylene |
| 10. 1-Propanol | 25. Benzene | 46. p-Xylene |
| 11. trans-1,2-Dichloroethylene | 26. Carbon tetrachloride | 47. Isoamyl acetate |
| 12. 1,1-Dichloroethane | 27. 2-Nitropropane | 48. Cyclohexanol |
| 13. 2-Butanone | 28. Trichloroethylene | 49. Styrene |
| 14. sec-Butanol | 29. 1,4-Dioxane | 50. o-Xylene |
| 15. Hexane | 30. 2-Ethoxyethanol (Cellosolve®) | 51. 1,1,2,2-Tetrachloroethane |
| | 31. n-Propyl acetate | 52. 2-Ethoxyethyl acetate |
| | 32. 4-Methyl-2-pentanone | 53. Butyl cellosolve |
| | 33. Isoamyl alcohol | 54. n-Amyl acetate isomers |
| | 34. Dimethylformamide | 55. 2-Methylcyclohexanol isomers |
| | 35. Toluene | 56. 1,2-Dichlorobenzene |
| | 36. Isobutyl acetate | 57. 2-Methylphenol |
| | | 58. 3-Methylphenol |
| | | 59. 4-Methylphenol |



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-20

Phase: bonded; poly(20% diphenyl/80% dimethylsiloxane)
Temp. Limits: -25 °C to 300 °C

Length (m)	D _f (µm)	Beta	Cat. No.
0.25 mm I.D. Fused Silica			
30	0.25	250	24086
60	0.25	250	24087-U
30	1.0	63	24196-U
0.32 mm I.D. Fused Silica			
30	0.25	320	24088
60	1.0	80	24194-U
0.53 mm I.D. Fused Silica			
30	0.50	265	25329-U
15	1.0	133	28569-U
30	1.0	133	25333

SPB-35

Phase: bonded; poly(35% diphenyl/65% dimethylsiloxane)
Temp. Limits: 0 °C to 300 °C

Length (m)	D _f (µm)	Beta	Cat. No.
0.25 mm I.D. Fused Silica			
30	0.25	250	24092
60	0.25	250	28568-U
0.32 mm I.D. Fused Silica			
30	0.25	320	24094
0.53 mm I.D. Fused Silica			
30	0.50	265	25331
30	1.0	133	25335

SPB-50

Phase: bonded; poly(50% diphenyl/50% dimethylsiloxane)
Temp. Limits: 30 °C to 310 °C

Length (m)	D _f (µm)	Beta	Cat. No.
0.25 mm I.D. Fused Silica			
30	0.25	250	24181
0.32 mm I.D. Fused Silica			
30	0.25	320	24187
0.53 mm I.D. Fused Silica			
30	0.50	265	25363

Equity-1701

Phase: bonded; poly(14% cyanopropylphenyl/86% dimethylsiloxane)
Temp. Limits: 0.25 and 0.32 mm I.D.: subambient to 280 °C
0.53 mm I.D.: subambient to 260 °C

Length (m)	D _f (µm)	Beta	Cat. No.
0.10 mm I.D. Fused Silica			
15	0.10	250	28343-U
0.25 mm I.D. Fused Silica			
15	0.25	250	28371-U
30	0.25	250	28372-U
60	0.25	250	28373-U
15	1.0	63	28374-U
30	1.0	63	28378-U
60	1.0	63	28379-U
0.32 mm I.D. Fused Silica			
15	0.25	320	28381-U
30	0.25	320	28382-U
60	0.25	320	28384-U
15	1.0	80	28386-U
30	1.0	80	28387-U
60	1.0	80	28388-U
0.53 mm I.D. Fused Silica			
15	0.5	265	28389-U
30	0.5	265	28391-U
15	1.0	132	28393-U
30	1.0	132	28394-U
15	1.5	88	28395-U
30	1.5	88	28396-U

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Cellosolve — Union Carbide Corp.

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