

Product Information

General Purpose Non-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 Non-Polar Column

The best approach to a new separation is to run it on a non-polar column that separates primarily by boiling point. This is useful since elution order can be predicted. Using columns with increased polarity can then be used to assist in confirming identity.

Column Choices

SPB™-Octyl: With a polarity approaching that of Squalane, this column is substantially more non-polar than that of the widely used "non-polar" methyl siloxane phases. Because these columns offer unique selectivity, they are ideal for multidimensional or confirmational analyses.

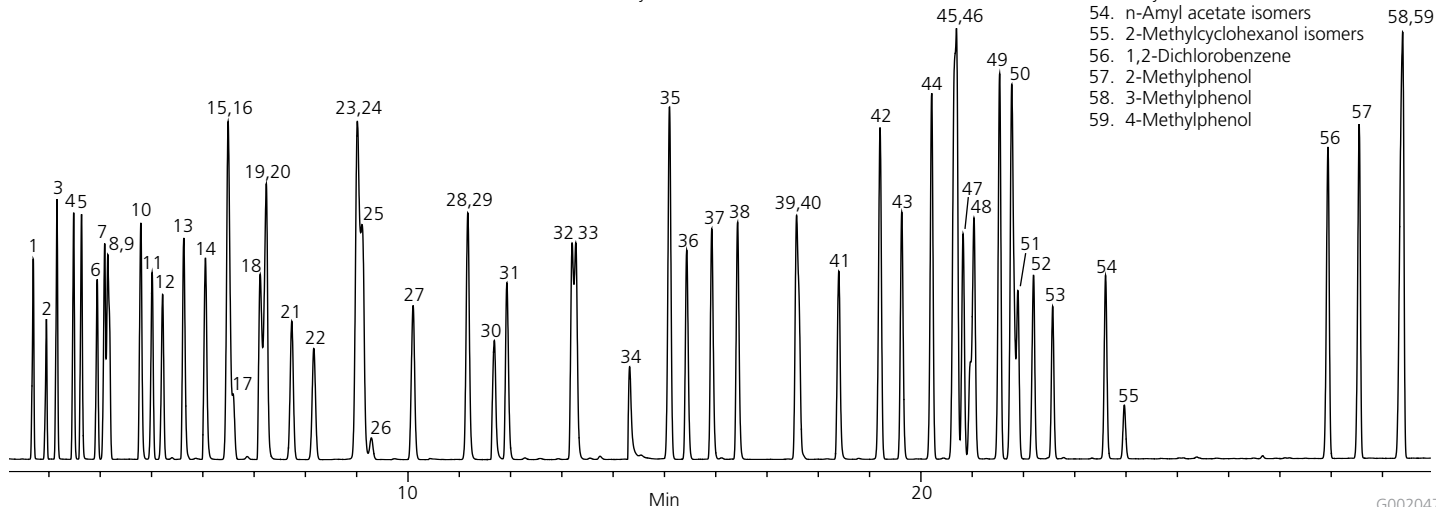
Equity™-1: The 100% methyl content makes this column ideally suited for petrochemical and industrial applications where compounds of varying boiling points exist in the sample. Elution order should be very close to the boiling point order of the analytes.

Equity-5: The low phenyl content, 5%, improves thermal stability of the phase, while still providing essentially a boiling point elution order. The phenyl content also provides a slight increase in selectivity, especially for aromatic compounds.

Common Industrial Solvents Analysis on Equity-1

column: Equity-1, 30 m x 0.32 mm I.D., 1.0 µm (28057-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 | 19. Isobutanol | 36. Isobutyl acetate |
| 2. Methyl formate | 20. 2-Methoxyethanol | 37. 2-Hexanone |
| 3. Ethanol | 21. 1,2-Dichloroethane | 38. Mesityl oxide |
| 4. Acetone | 22. 1,1,1-Trichloroethane | 39. Tetrachloroethene |
| 5. 2-Propanol | 23. Isopropyl acetate | 40. n-Butyl acetate |
| 6. Ethyl formate | 24. n-Butanol | 41. Diacetone alcohol |
| 7. 1,1-Dichloroethylene | 25. Benzene | 42. Chlorobenzene |
| 8. Methylene chloride | 26. Carbon tetrachloride | 43. 5-Methyl-2-hexanone |
| 9. Methyl acetate | 27. 2-Nitropropane | 44. Ethyl benzene |
| 10. 1-Propanol | 28. Trichloroethylene | 45. m-Xylene |
| 11. trans-1,2-Dichloroethylene | 29. 1,4-Dioxane | 46. p-Xylene |
| 12. 1,1-Dichloroethane | 30. 2-Ethoxyethanol (Cellosolve®) | 47. Isoamyl acetate |
| 13. 2-Butanone | 31. n-Propyl acetate | 48. Cyclohexanol |
| 14. sec-Butanol | 32. 4-Methyl-2-pentanone | 49. Styrene |
| 15. Hexane | 33. Isoamyl alcohol | 50. o-Xylene |
| 16. Ethyl acetate | 34. Dimethylformamide | 51. 1,1,2,2-Tetrachloroethane |
| 17. Chloroform | 35. Toluene | 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 |



G002047

SPB-Octyl

Phase: bonded; poly(50% n-octyl/50% methylsiloxane)
Temp. Limits: -60 °C to 280 °C (isothermal)

Length (m)	D _f (µm)	Beta	Cat. No.
0.25 mm I.D. Fused Silica			
30	0.25	250	24218-U
60	0.25	250	24219-U
30	1.0	63	24232
60	1.0	63	24233-U
0.53 mm I.D. Fused Silica			
60	3.0	44	25398

Equity-1

Phase: bonded; poly(dimethylsiloxane)
Temp. Limits: 0.25 and 0.32 mm I.D.: -60 °C to 325/350 °C
0.53 mm I.D.: -60 °C to 300/320 °C (<=1.5 µm d_p)
0.53 mm I.D.: -60 °C to 260/280 °C (>1.5 µm d_p)

Length (m)	D _f (µm)	Beta	Cat. No.
0.10 mm I.D. Fused Silica			
15	0.10	250	28039-U
0.20 mm I.D. Fused Silica			
12	0.33	152	28041-U
25	0.33	152	28042-U
10	1.2	42	28043-U
0.25 mm I.D. Fused Silica			
30	0.10	625	28044-U
15	0.25	250	28045-U
30	0.25	250	28046-U
60	0.25	250	28047-U
15	1.0	63	28048-U
30	1.0	63	28049-U
60	1.0	63	28050-U
100	1.0	63	28052-U
0.32 mm I.D. Fused Silica			
30	0.10	800	28053-U
15	0.25	320	28054-U
30	0.25	320	28055-U
60	0.25	320	28056-U
30	1.0	80	28057-U
60	1.0	80	28058-U
100	1.0	80	28060-U
30	2.0	40	28061-U
30	5.0	16	28062-U
60	5.0	16	28063-U
0.53 mm I.D. Fused Silica			
15	0.10	1325	28064-U
30	0.10	1325	28065-U
15	0.5	265	28067-U
30	0.5	265	28068-U
15	1.0	133	28069-U
30	1.0	133	28071-U

Equity-1 (contd.)

Length (m)	D _f (µm)	Beta	Cat. No.
0.53 mm I.D. Fused Silica			
15	1.5	88	28072-U
30	1.5	88	28073-U
60	1.5	88	28074-U
15	3.0	44	28075-U
30	3.0	44	28076-U
60	3.0	44	28077-U
15	5.0	27	28079-U
30	5.0	27	28081-U
60	5.0	27	28082-U

Equity-5

Phase: bonded; poly(5% diphenyl/95% dimethylsiloxane)
Temp. Limits: 0.25 and 0.32 mm I.D.: -60 °C to 325/350 °C
0.53 mm I.D.: -60 °C to 300/320 °C (<=1.5 µm d_p)
0.53 mm I.D.: -60 °C to 260/280 °C (>1.5 µm d_p)

Length (m)	D _f (µm)	Beta	Cat. No.
0.10 mm I.D. Fused Silica			
15	0.10	250	28083-U
0.20 mm I.D. Fused Silica			
15	0.20	250	28084-U
30	0.20	250	28085-U
60	0.20	250	28086-U
12	0.33	152	28087-U
0.25 mm I.D. Fused Silica			
15	0.25	250	28088-U
30	0.25	250	28089-U
60	0.25	250	28090-U
30	0.5	125	28092-U
15	1.0	63	28093-U
30	1.0	63	28094-U
60	1.0	63	28095-U
0.32 mm I.D. Fused Silica			
15	0.25	320	28096-U
30	0.25	320	28097-U
60	0.25	320	28098-U
30	0.32	250	28099-U
30	0.5	160	28195-U
30	1.0	80	28199-U
60	1.0	80	28251-U
0.53 mm I.D. Fused Silica			
15	0.5	265	28252-U
30	0.5	265	28259-U
60	0.5	265	28263-U
30	1.0	133	28264-U
15	1.5	88	28265-U
30	1.5	88	28267-U
30	3.0	44	28268-U
60	3.0	44	28269-U
15	5.0	27	28278-U
30	5.0	27	28279-U
60	5.0	27	28293-U

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Cellosolve — Union Carbide Corp.

Order/Customer Service 800-247-6628, 800-325-3010
Fax 800-325-5052 • E-mail supelco@sial.com

Technical Service 800-359-3041, 814-359-3041
Fax 800-359-3044, 814-359-5468 • E-mail techservice@sial.com

SUPELCO • 595 North Harrison Road, Bellefonte, PA 16823-0048 • 814-359-3441

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