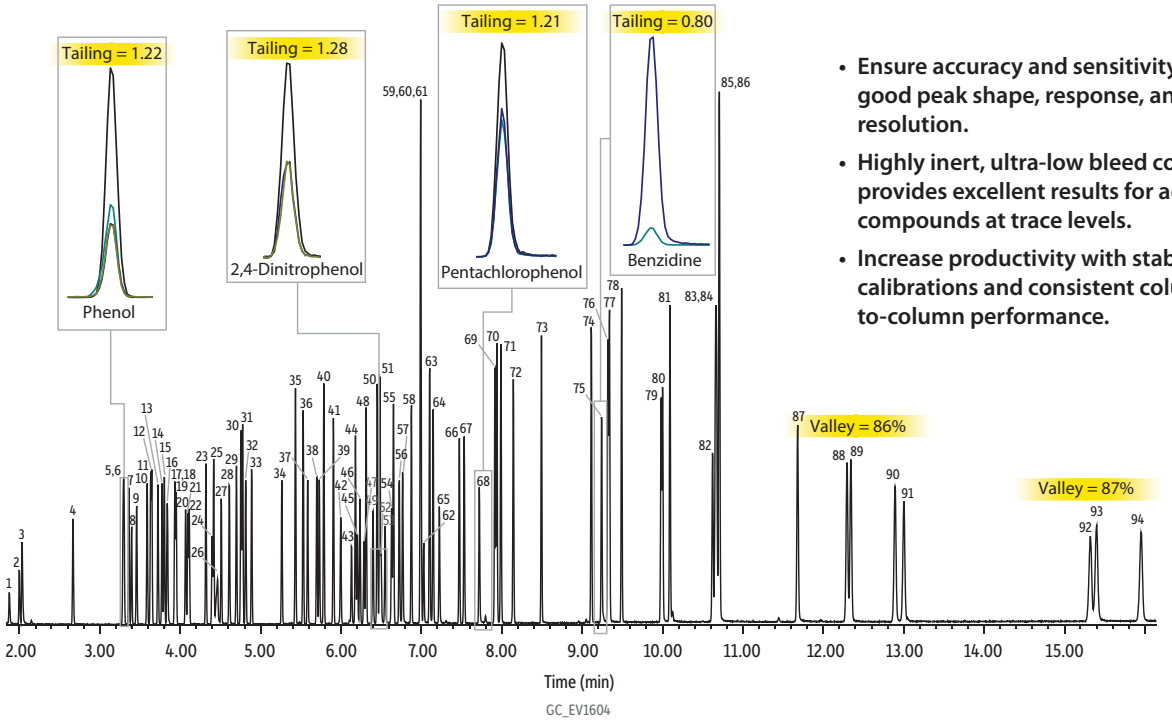
Semivolatiles Analysis on Rxi-SVOCms



- Ensure accuracy and sensitivity with good peak shape, response, and resolution.
- Highly inert, ultra-low bleed column provides excellent results for active compounds at trace levels.
- Increase productivity with stable calibrations and consistent column-to-column performance.

Peaks	tR (min)
1. (IS) 1,4-Dioxane-d8	1.87
2. N-Nitrosodimethylamine	2.00
3. Pyridine	2.03
4. (SS) 2-Fluorophenol	2.67
5. (SS) Phenol-d6	3.29
6. Phenol	3.30
7. Aniline	3.36
8. Bis(2-chloroethyl) ether	3.40
9. 2-Chlorophenol	3.46
10. 1,3-Dichlorobenzene	3.59
11. (IS) 1,4-Dichlorobenzene-D4	3.63
12. 1,4-Dichlorobenzene	3.65
13. Benzyl alcohol	3.72
14. 1,2-Dichlorobenzene	3.78
15. 2-Methylphenol	3.80
16. Bis(2-Chloroisopropyl)ether	3.84
17. 4-Methylphenol	3.93
18. 3-Methylphenol	3.93
19. N-Nitrosodi-N-propylamine	3.95
20. Hexachloroethane	4.07
21. (SS) Nitrobenzene-D5	4.10
22. Nitrobenzene	4.11
23. Isophorone	4.32
24. 2-Nitrophenol	4.40

Peaks	tR (min)
25. 2,4-Dimethylphenol	4.42
26. Benzoic acid	4.46
27. Bis(2-chloroethoxy)methane	4.51
28. 2,4-Dichlorophenol	4.61
29. 1,2,4-Trichlorobenzene	4.70
30. (IS) Naphthalene-D8	4.76
31. Naphthalene	4.78
32. 4-Chloroaniline	4.82
33. Hexachlorobutadiene	4.89
34. 4-Chloro-3-methylphenol	5.26
35. 2-Methylnaphthalene	5.43
36. 1-Methylnaphthalene	5.53
37. Hexachlorocyclopentadiene	5.59
38. 2,4,6-Trichlorophenol	5.70
39. 2,4,5-Trichlorophenol	5.73
40. (SS) 2-Fluorobiphenyl	5.79
41. 2-Chloronaphthalene	5.91
42. 2-Nitroaniline	6.00
43. 1,4-Dinitrobenzene	6.13
44. Dimethyl phthalate	6.18
45. 1,3-Dinitrobenzene	6.20
46. 2,6-Dinitrotoluene	6.24
47. 1,2-Dinitrobenzene	6.29
48. Acenaphthylene	6.31

Peaks	tR (min)
49. 3-Nitroaniline	6.40
50. (IS) Acenaphthene-D10	6.45
51. Acenaphthene	6.48
52. 2,4-Dinitrophenol	6.50
53. 4-Nitrophenol	6.55
54. 2,4-Dinitrotoluene	6.63
55. Dibenzofuran	6.65
56. 2,3,5,6-Tetrachlorophenol	6.73
57. 2,3,4,6-Tetrachlorophenol	6.77
58. Diethyl phthalate	6.88
59. 4-Chlorophenyl phenyl ether	6.99
60. Fluorene	6.99
61. 4-Nitroaniline	7.00
62. 4,6-Dinitro-2-methylphenol	7.03
63. N-Nitrosodiphenylamine	7.10
64. N,N-Diphenylhydrazine	7.15
65. (SS) 2,4,6-Tribromophenol	7.23
66. 4-Bromophenyl phenyl ether	7.47
67. Hexachlorobenzene	7.53
68. Pentachlorophenol	7.72
69. (IS) Phenanthrene-D10	7.92
70. Phenanthrene	7.94
71. Anthracene	7.99
72. Carbazole	8.15

Peaks	tR (min)
73. di-*n*-Butyl phthalate	8.49
74. Fluoranthene	9.12
75. Benzidine	9.24
76. (SS) Pyrene-D10	9.32
77. Pyrene	9.34
78. (SS) *p*-Terphenyl-d14	9.49
79. 3,3'-Dimethylbenzidine	9.98
80. Butyl benzyl phthalate	10.00
81. Bis(2-ethylhexyl) adipate	10.09
82. 3,3'-Dichlorobenzidine	10.62
83. Benz[a]anthracene	10.66
84. (IS) Chrysene-D12	10.67
85. Chrysene	10.71
86. Bis(2-ethylhexyl) phthalate	10.71
87. Di-*n*-octyl phthalate	11.68
88. Benzo[b]fluoranthene	12.30
89. Benzo[k]fluoranthene	12.34
90. Benzo[a]pyrene	12.89
91. (IS) Perylene-D12	13.00
92. Indeno[1,2,3-cd]pyrene	15.32
93. Dibenz[a,h]anthracene	15.40
94. Benzo[ghi]perylene	15.95

All compounds are 2 ng on column.

Column Rxi-SVOCms, 30 m, 0.25 mm ID, 0.25 µm (cat.# 16623)
Standard/Sample 8270 MegaMix standard (cat.# 31850)
8270 Benzidines mix (cat.# 31852)
Benzoic acid (cat.# 31879)
Revised SV internal standard mix (cat.# 31886)
Revised B/N surrogate mix (cat.# 31888)
Acid surrogate mix (cat.# 31063)
Diluent: Dichloromethane
Conc.: 20 µg/mL
Injection
Inj. Vol.: 1 µL split (split ratio 10:1)
Liner: Topaz 4.0 mm ID single taper inlet liner with wool (cat.# 23303)
Inj. Temp.: 250 °C
Split Vent Flow Rate: 12 mL/min
Oven
Oven Temp.: 60 °C (hold 0.5 min) to 285 °C at 25 °C/min to 305 °C at 3 °C/min to 330 °C at 20 °C/min (hold 5 min)
Carrier Gas He, constant flow
Flow Rate: 1.2 mL/min
Detector MS
Mode: Scan

Scan Program:

Group	Start Time (min)	Scan Range (amu)	Scan Rate (scans/sec)
1	1.55	35-500	5.9

Transfer Line Temp.: 280 °C
Analyzer Type: Quadrupole
Source Type: Inert
Drawout Plate: 6 mm ID
Source Temp.: 330 °C
Quad Temp.: 180 °C
Electron Energy: 70 eV
Tune Type: DFTPP
Ionization Mode: EI
Instrument Agilent 7890A GC & 5975C MSD
Sample Preparation Samples were aliquoted into amber 2 mL, 9 mm short-cap, screw-thread vials (cat.# 21143) containing glass Big Mouth inserts (cat.# 21782) and sealed with 2.0 mL, 9 mm short-cap, screw-vial closures (cat.# 23842).