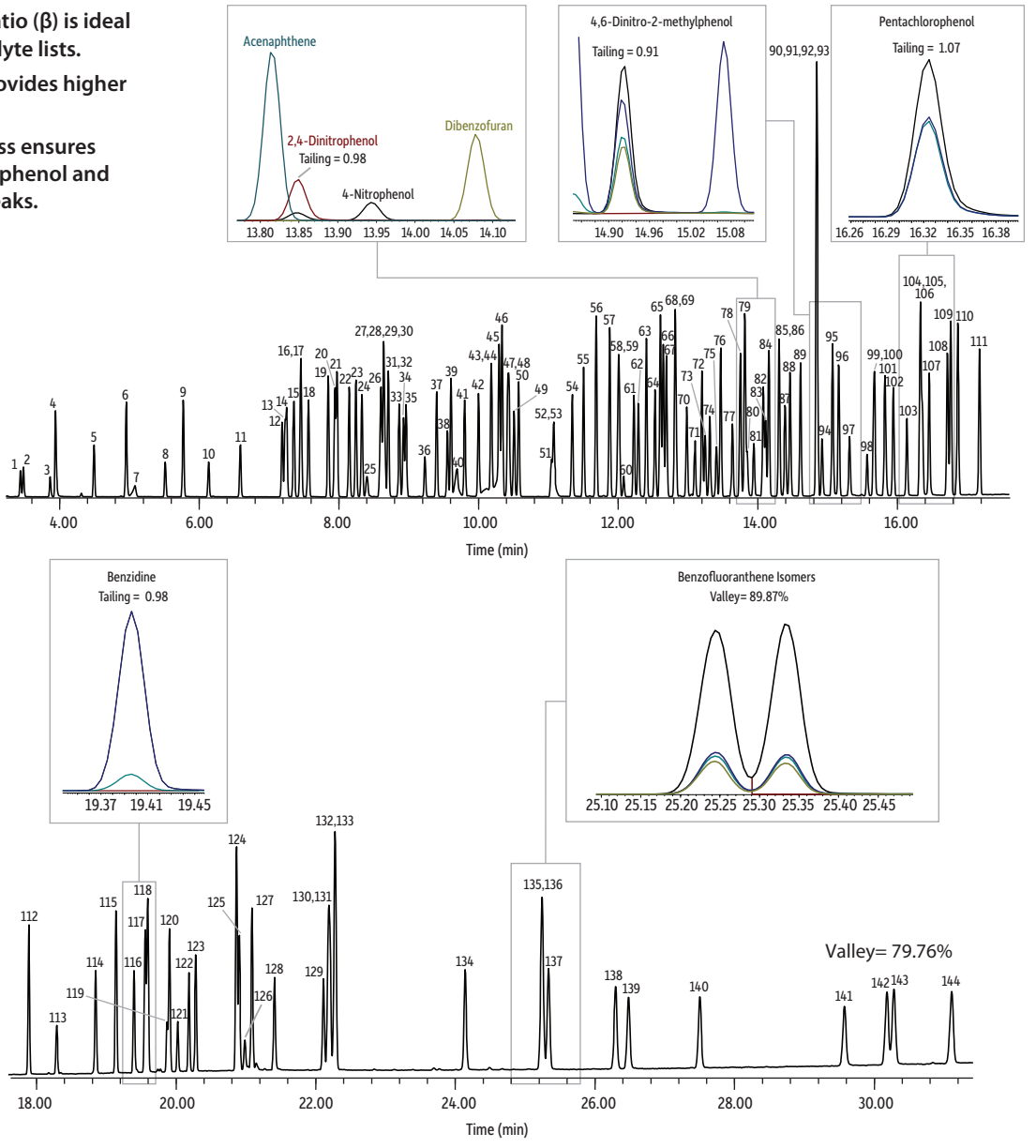
Semivolatiles on Rxi-SVOCms

- **Low phase ratio (β) is ideal for large analyte lists.**
- **Thick film provides higher capacity.**
- **High inertness ensures symmetrical phenol and benzidine peaks.**



GC_EV1505

Column	Rxi-SVOCms, 30 m, 0.25 mm ID, 0.50 µm (cat.# 16638)
Standard/Sample	8270/Appendix IX kit (cat.# 31815) Revised B/N surrogate mix (cat.# 31888) Acid surrogate mix (cat.# 31063)
Diluent:	Dichloromethane
Conc.:	20 µg/mL (2 ng on-column)
Injection	
Inj. Vol.:	1 µL split (split ratio 10:1)
Liner:	Topaz 4.0 mm ID single taper inlet liner w/ wool (cat.# 23303)
Inj. Temp.:	250 °C
Oven	
Oven Temp.:	40 °C (hold 1 min) to 280 °C at 12.4 °C/min to 330 °C at 3.3 °C/min (hold 3.65 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	2.0	50-500	3.6

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
Solvent Delay Time:	2 min
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).

RESTEK

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Semivolatiles on Rxi-SVOCms

	Peaks	t_R (min)
1.	1,4-Dioxane-d8	3.44
2.	1,4-Dioxane	3.48
3.	N-Nitrosodimethylamine	3.87
4.	Pyridine	3.94
5.	Ethyl methacrylate	4.50
6.	2-Picoline	4.96
7.	N-Nitrosomethylethylamine	5.08
8.	Methyl methanesulfonate	5.52
9.	(SS) 2-Fluorophenol	5.77
10.	N-Nitrosodiethylamine	6.14
11.	Ethyl methanesulfonate	6.59
12.	Benzaldehyde	7.19
13.	(SS) Phenol-d6	7.23
14.	Phenol	7.26
15.	Aniline	7.36
16.	Bis(2-chloroethyl) ether	7.45
17.	Pentachloroethane	7.46
18.	2-Chlorophenol	7.57
19.	1,3-Dichlorobenzene	7.85
20.	(IS) 1,4-Dichlorobenzene-D4	7.95
21.	1,4-Dichlorobenzene	7.98
22.	Benzyl alcohol	8.15
23.	1,2-Dichlorobenzene	8.25
24.	2-Methylphenol	8.33
25.	Bis(2-Chloroisopropyl)ether	8.41
26.	N-Nitrosopyrrolidine	8.59
27.	4-Methylphenol	8.61
28.	3-Methylphenol	8.61
29.	N-Nitrosodi-N-propylamine	8.64
30.	Acetophenone	8.65
31.	4-Nitrosomorpholine	8.66
32.	*o*-Toluidine	8.71
33.	Hexachloroethane	8.87
34.	(SS) Nitrobenzene-D5	8.93
35.	Nitrobenzene	8.96
36.	N-Nitrosopiperidine	9.23
37.	Isophorone	9.40
38.	2-Nitrophenol	9.56
39.	2,4-Dimethylphenol	9.61
40.	Benzoic acid	9.69
41.	Bis(2-chloroethoxy)methane	9.80
42.	2,4-Dichlorophenol	10.00
43.	1,2,4-Trichlorobenzene	10.18
44.	Phentermine	10.18
45.	(IS) Naphthalene-D8	10.30
46.	Naphthalene	10.34
47.	4-Chloroaniline	10.42
48.	2,6-Dichlorophenol	10.44
49.	Hexachloropropene	10.51
50.	Hexachlorobutadiene	10.58
51.	Caprolactam	11.05
52.	N-Nitroso-N-butylamine	11.08
53.	1,4-Phenylenediamine	11.09
54.	4-Chloro-3-methylphenol	11.34
55.	Isosafrole I	11.50
56.	2-Methylnaphthalene	11.69
57.	1-Methylnaphthalene	11.88
58.	Hexachlorocyclopentadiene	12.00
59.	1,2,4,5-Tetrachlorobenzene	12.01
60.	Isosafrole II	12.08
61.	2,4,6-Trichlorophenol	12.23
62.	2,4,5-Trichlorophenol	12.29
63.	(SS) 2-Fluorobiphenyl	12.41
64.	Safrole	12.53
65.	Biphenyl	12.61
66.	2-Chloronaphthalene	12.65
67.	1-Chloronaphthalene	12.69
68.	Diphenyl ether	12.82
69.	2-Nitroaniline	12.83
70.	1,4-Naphthoquinone	12.98
71.	1,2-Dinitrobenzene	13.06
72.	1,3-Dinitrobenzene	13.10

	Peaks	t_R (min)
73.	Dimethyl phthalate	13.20
74.	2,6-Dinitrotoluene	13.32
75.	1,4-Dinitrobenzene	13.41
76.	Acenaphthylene	13.47
77.	3-Nitroaniline	13.64
78.	(IS) Acenaphthene-d10	13.75
79.	Acenaphthene	13.82
80.	2,4-Dinitrophenol	13.85
81.	4-Nitrophenol	13.95
82.	Pentachlorobenzene	14.08
83.	2,4-Dinitrotoluene	14.12
84.	Dibenzofuran	14.16
85.	1-Naphthalamine	14.31
86.	2,3,5,6-Tetrachlorophenol	14.31
87.	2,3,4,6-Tetrachlorophenol	14.39
88.	2-Naphthalamine	14.46
89.	Diethyl Phthalate	14.61
90.	Fluorene	14.85
91.	4-Chlorophenyl phenyl ether	14.85
92.	2-Methyl-5-nitroaniline	14.85
93.	4-Nitroaniline	14.85
94.	4,6-Dinitro-2-methylphenol	14.92
95.	N-Nitrosodiphenylamine	15.07
96.	N,N-Diphenylhydrazine	15.16
97.	(SS) 2,4,6-Tribromophenol	15.32
98.	1,3,5-Trinitrobenzene	15.57
99.	Phenacetin	15.67
100.	Diallate	15.72
101.	4-Bromophenyl phenyl ether	15.82
102.	Hexachlorobenzene	15.94
103.	Atrazine	16.14
104.	Pentachlorophenol	16.32
105.	4-Aminobiphenyl	16.33
106.	Pentachloronitrobenzene	16.36
107.	Propyzamide	16.46
108.	(IS) Phenanthrene-D10	16.72
109.	Phenanthrene	16.77
110.	Anthracene	16.86
111.	Carbazole	17.18
112.	di-*n*-Butyl phthalate	17.89
113.	4-Nitroquinoline 1-oxide	18.29
114.	Isodrin	18.85
115.	Fluoranthene	19.14
116.	Benzidine	19.40
117.	(SS) Pyrene-D10	19.56
118.	Pyrene	19.59
119.	Aramite I	19.87
120.	(SS) *p*-Terphenyl-d14	19.91
121.	Aramite II	20.02
122.	Dimethylaminoazobenzene	20.19
123.	4,4'-Dichlorobenzilate	20.28
124.	3,3'-Dimethylbenzidine	20.87
125.	Butyl benzyl phthalate	20.91
126.	Kepone	20.99
127.	Bis(2-ethylhexyl) adipate	21.09
128.	2-(Acetylamino)fluorene	21.41
129.	3,3'-Dichlorobenzidine	22.11
130.	Benz[a]anthracene	22.18
131.	(IS) Chrysene-D12	22.21
132.	Chrysene	22.27
133.	Bis(2-ethylhexyl) phthalate	22.28
134.	Di-*n*-octyl phthalate	24.14
135.	Benzo[b]fluoranthene	25.24
136.	7,12-Dimethylbenzo[a]anthracene	25.24
137.	Benzo[k]fluoranthene	25.33
138.	Benzo[a]pyrene	26.30
139.	(IS) Perylene-D12	26.48
140.	3-Methylcholanthrene	27.50
141.	Dibenz[a,j]acridine	29.58
142.	Indeno[1,2,3-cd]pyrene	30.18
143.	Dibenz[a,h]anthracene	30.28
144.	Benzo[ghi]perylene	31.11