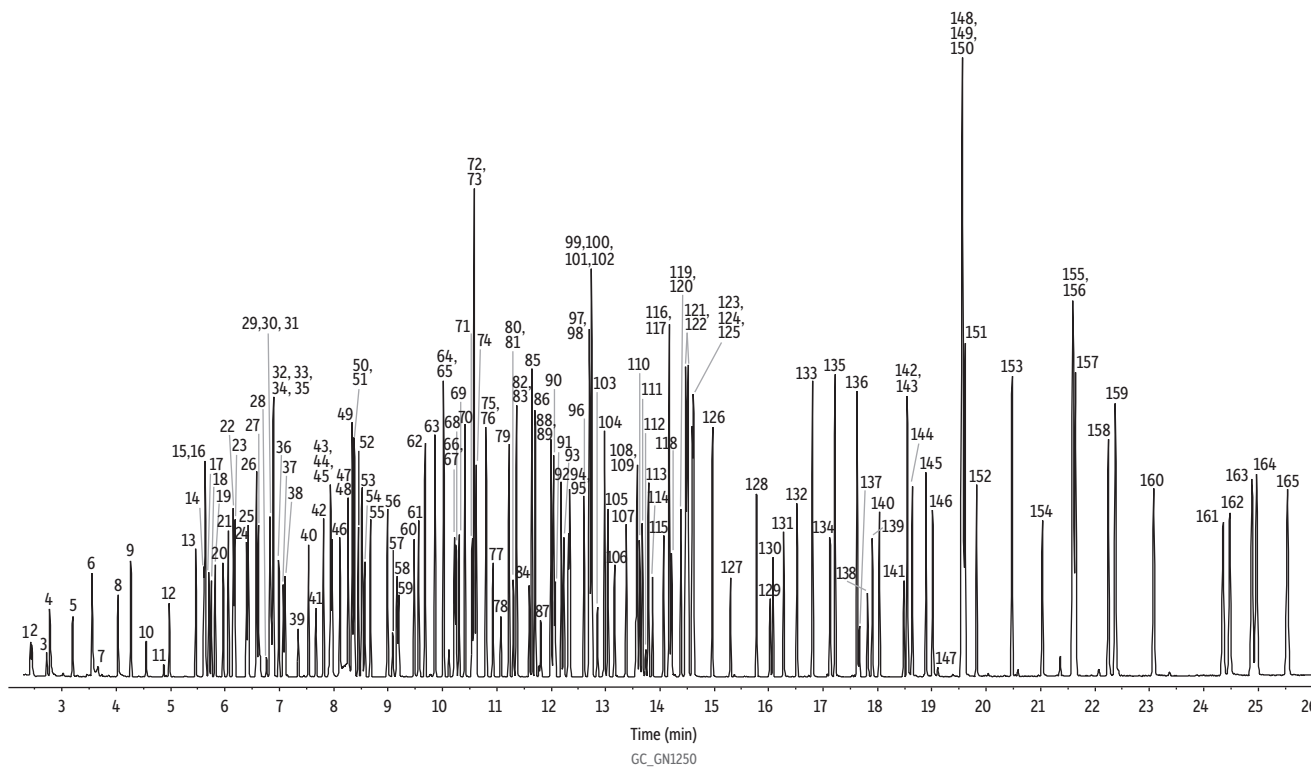


Semivolatiles on RMX-5SiI MS by Method 8270D (GC-MS in Scan Mode)



Peaks	tr (min)	Conc. (µg/mL)
1. 1,4-Dioxane-d8	2.400	1
2. 1,4-Dioxane	2.428	1
3. N-Nitrosodimethylamine	2.702	1
4. Pyridine	2.774	1
5. Ethyl methacrylate	3.175	1
6. 2-Picoline	3.554	1
7. N-Nitrosomethylethylamine	3.648	1
8. Methyl methanesulfonate	4.021	1
9. 2-Fluorophenol	4.258	1
10. Acrylamide	4.543	1
11. N-Nitrosodiethylamine	4.875	1
12. Ethyl methanesulfonate	4.977	1
13. Benzaldehyde	5.454	1
14. Phenol-d6	5.612	1
15. Phenol	5.629	1
16. Aniline	5.638	1
17. Pentachloroethane	5.705	1
18. Bis(2-chloroethoxy)ether	5.743	1
19. 2-Chlorophenol	5.814	1
20. n-Decane (C10)	5.962	1
21. 1,3-Dichlorobenzene	6.066	1
22. 1,4-Dichlorobenzene-d4	6.153	1
23. 1,4-Dichlorobenzene	6.180	1
24. Benzyl alcohol	6.393	1
25. 1,2-Dichlorobenzene	6.426	1
26. 2-Methylphenol (o-cresol)	6.612	1
27. 2,2'-Oxybis(1-chloropropane)	6.634	1
28. N-Nitrosopyrrolidine	6.765	1
29. Acetophenone	6.825	1
30. N-Nitrosomorpholine	6.836	1
31. N-Nitroso-di-n-propylamine	6.847	1
32. 3-Methylphenol (m-cresol)	6.885	1
33. 4-Methylphenol (p-cresol)	6.885	1
34. Indene	6.885	1
35. o-Toluidine	6.890	1
36. Hexachloroethane	6.989	1
37. Nitrobenzene-d5	7.067	1
38. Nitrobenzene	7.101	1

Peaks	tr (min)	Conc. (µg/mL)
39. N-Nitrosopiperidine	7.347	1
40. Isophorone	7.536	1
41. 2-Nitrophenol	7.673	1
42. 2,4-Dimethylphenol	7.816	1
43. Benzoic acid	7.943	1
44. O,O,O-Triethyl phosphorothioate	7.943	1
45. Bis(2-chloroethoxy)methane	7.970	1
46. 2,4-Dichlorophenol	8.113	1
47. α,α-Dimethylphenethylamine (phentermine)	8.268	1
48. 1,2,4-Trichlorobenzene	8.268	1
49. Naphthalene-d8	8.342	1
50. Naphthalene	8.376	1
51. α-Terpineol	8.451	1
52. 4-Chloroaniline	8.519	1
53. 2,6-Dichlorophenol	8.519	1
54. Hexachloropropene	8.571	1
55. Hexachlorobutadiene	8.674	1
56. Quinoline	8.988	1
57. ε-Caprolactam	9.085	1
58. 1,4-Phenylenediamine	9.160	1
59. N-Nitrosodibutylamine	9.195	1
60. 4-Chloro-3-methylphenol	9.480	1
61. Isosafrole isomer 2	9.560	1
62. 2-Methylnaphthalene	9.680	1
63. 1-Methylnaphthalene	9.857	1
64. 1,2,4,5-Tetrachlorobenzene	10.023	1
65. Hexachlorocyclopentadiene	10.023	1
66. 2,3-Dichloroaniline	10.217	1
67. Isosafrole isomer 1	10.217	1
68. 2,4,6-Trichlorophenol	10.248	1
69. 2,4,5-Trichlorophenol	10.303	1
70. 2-Fluorobiphenyl	10.412	1
71. Safrole	10.547	1
72. Biphenyl	10.585	1
73. 2-Chloronaphthalene	10.585	1
74. 1-Chloronaphthalene	10.623	1
75. 2-Nitroaniline	10.801	1
76. Diphenyl ether	10.801	1

Peaks	tr (min)	Conc. (µg/mL)	Peaks	tr (min)	Conc. (µg/mL)
77. 1,4-Naphthoquinone	10.926	1	122. Phenanthrene	14.517	1
78. 1,4-Dinitrobenzene	11.075	1	123. Dinoseb	14.599	1
79. Dimethylphthalate	11.224	1	124. Disulfoton	14.599	1
80. 1,3-Dinitrobenzene	11.304	1	125. Anthracene	14.614	1
81. 2,6-Dinitrotoluene	11.304	1	126. Carbazole	14.963	1
82. 1,2-Dinitrobenzene	11.361	1	127. Methyl parathion	15.295	1
83. Acenaphthylene	11.361	1	128. Di-n-butyl phthalate	15.775	1
84. 3-Nitroaniline	11.595	1	129. 4-Nitroquinoline-N-oxide	16.027	1
85. Acenaphthene-d10	11.647	1	130. Parathion (ethyl parathion)	16.078	1
86. Acenaphthene	11.704	1	131. Methapyrilene hydrochloride	16.273	1
87. 2,4-Dinitrophenol	11.809	1	132. Isodrin	16.518	1
88. 4-Nitrophenol	11.996	1	133. Fluoranthene	16.804	1
89. Pentachlorobenzene	11.996	1	134. Benzidine	17.127	1
90. Dibenzofuran	12.040	1	135. Pyrene	17.222	1
91. 2,4-Dinitrotoluene	12.070	1	136. p-Terphenyl-d14	17.622	1
92. 1-Naphthylamine (1-aminonaphthalene)	12.184	1	137. Aramite isomer 2	17.668	1
93. 2,3,5,6-Tetrachlorophenol	12.236	1	138. Aramite isomer 1	17.822	1
94. 2,3,4,6-Tetrachlorophenol	12.319	1	139. p-Dimethylaminoazobenzene	17.908	1
95. 2-Naphthylamine (2-aminonaphthalene)	12.341	1	140. Chlorobenzilate	18.034	1
96. Diethylphthalate	12.602	1	141. Famphur	18.485	1
97. n-Hexadecane (C16)	12.699	1	142. 3,3'-Dimethylbenzidine (o-tolidine)	18.548	1
98. Fluorene	12.699	1	143. Kepone	18.548	1
99. Zalophus (thionazine)	12.745	1	144. Benzyl butyl phthalate	18.640	1
100. 4-Chlorophenyl phenyl ether	12.745	1	145. Bis(2-ethylhexyl)adipate	18.891	1
101. 4-Nitroaniline	12.745	1	146. 2-Acetylaminofluorene	19.017	1
102. 5-Nitro-o-toluidine	12.745	1	147. 4,4'-Methylene-bis(2-chloroaniline)	19.108	1
103. 4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	12.853	1	148. 3,3'-Dichlorobenzidine	19.560	1
104. Diphenylamine†	12.979	1	149. Benz[a]anthracene	19.560	1
105. Azobenzene*	13.042	1	150. Chrysene-d12	19.560	1
106. 2,4,6-Tribromophenol	13.162	1	151. Chrysene	19.612	1
107. Sulfotepp	13.379	1	152. Bis(2-ethylhexyl)phthalate	19.823	1
108. 1,3,5-Trinitrobenzene	13.579	1	153. 6-Methylchrysene	20.475	1
109. Phorate	13.579	1	154. Di-n-octyl phthalate	21.030	1
110. Phenacetin	13.625	1	155. Benzo[b]fluoranthene	21.590	1
111. 4-Bromophenyl phenyl ether	13.677	1	156. 7,12-Dimethylbenz[a]anthracene	21.590	1
112. Diallate	13.734	1	157. Benzo[k]fluoranthene	21.641	1
113. Hexachlorobenzene	13.785	1	158. Benzo[a]pyrene	22.248	1
114. Dimethoate	13.865	1	159. Perylene-d12	22.379	1
115. Atrazine	14.071	1	160. 3-Methylcholanthrene	23.082	1
116. 4-Aminobiphenyl	14.168	1	161. Dibenzo(a,h)acridine	24.357	1
117. Pentachlorophenol	14.170	1	162. Dibenzo[a,j]acridine	24.483	1
118. Pentachloronitrobenzene (Quintozene)	14.214	1	163. Indeno[1,2,3-cd]pyrene	24.883	1
119. Propylamide	14.380	1	164. Dibenzo[a,h]anthracene	24.969	1
120. Phenanthrene-d10	14.477	1	165. Benzo[g,h,i]perylene	25.541	1
121. n-Octadecane (C18)	14.517	1			

Column RMX-5SIL MS, 30 m, 0.25 mm ID, 0.25 µm (cat.# 17323)

Standard/Sample

Methapyrilene (cat.# 32460)
Appendix IX mix #1, revised (cat.# 32459)
SVOC additions (cat.# 31909)
Benzoic acid (cat.# 31879)
8270 MegaMix (cat.# 31850)
Appendix IX mix #2 (cat.# 31806)
Acid surrogate mix (4/89 SOW) (cat.# 31025)
Base neutral surrogate mix (4/89 SOW) (cat.# 31024)
Revised SV internal standard mix (cat.# 31886)

Diluent:

Conc.: 1 µg/mL

Injection

Inj. Vol.: 1 µL split (split ratio 10:1)
Liner: Topaz 4.0 mm ID single taper liner w/wool (cat.# 23303)
Inj. Temp.: 250 °C
Split Vent Flow Rate: 12 mL/min

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

Linear Velocity:

39.7 cm/sec

Detector

MS

Mode:

Scan

Scan Program:

Group	Start Time (min)	Scan Range (amu)	Scan Rate (scans/sec)
1	2	35-550	5

Transfer Line Temp.:

280 °C

Analyzer Type:

Quadrupole

Source Temp.:

330 °C

Quad Temp.:

180 °C

Solvent Delay Time:

2 min

Tune Type:

PFTBA

Ionization Mode:

El

Instrument

Agilent 7890B GC & 5977B MSD

To simplify ordering, the SVOC MegaMix 150 kit (cat.# 31907) contains one ampul each of the following standards that were used in this experiment.

• 8270 MegaMix (cat.# 31850)

• SVOC Additions standard (cat.# 31909)

• Appendix IX mix #1, revised (cat.# 32459)

• Methapyrilene (cat.# 32460)

• Appendix IX mix #2 (cat.# 31806)

• Benzoic acid (cat.# 31879)

