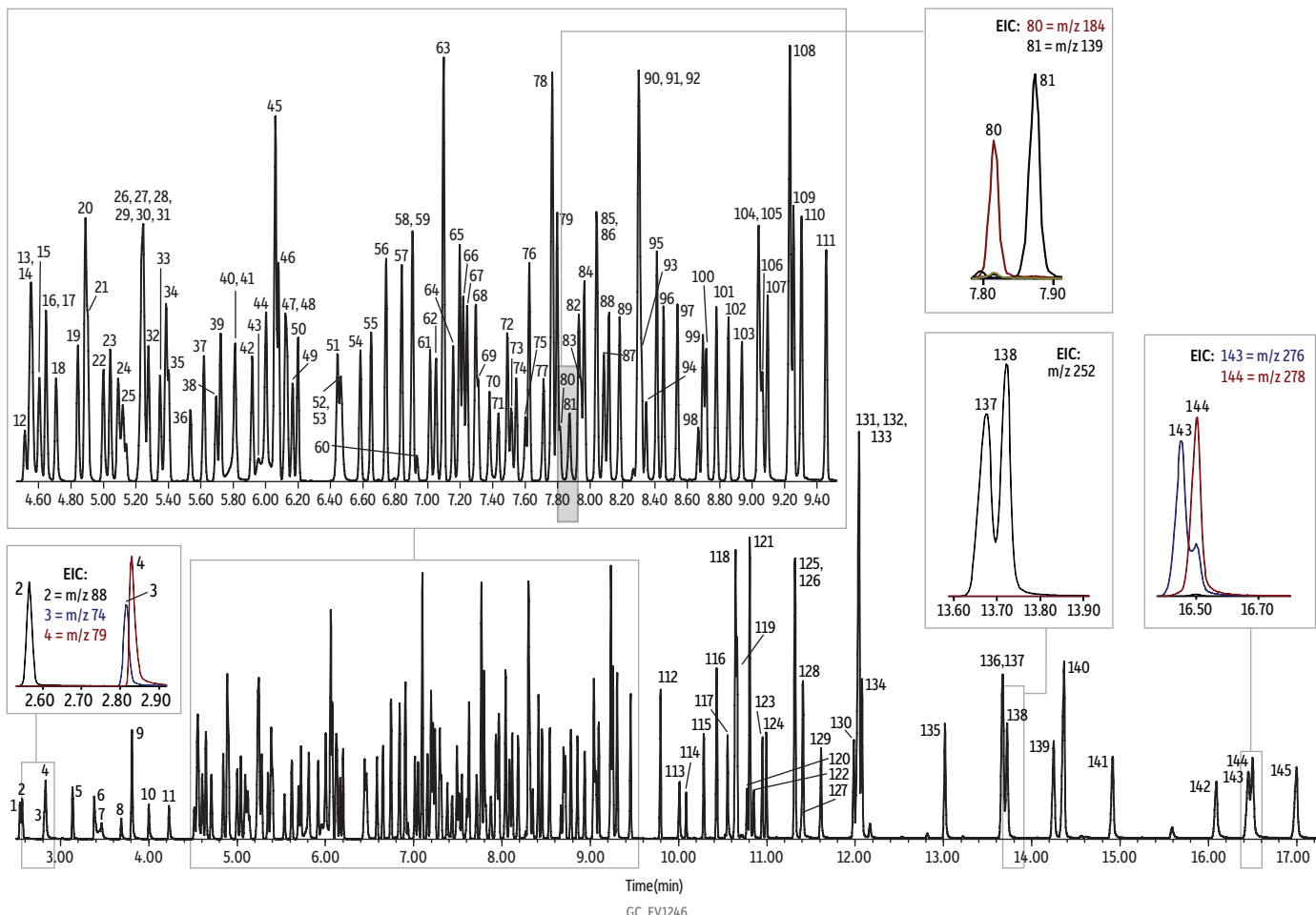


# Semivolatile Organics w/Appendix IX on Rxi-5Sil MS by U.S. EPA Method 8270



Peaks	25. Bis(2-Chloroisopropyl)ether	50. Hexachlorobutadiene	75. 1,2-Dinitrobenzene	98. 1,3,5-Trinitrobenzene	123. Dimethylaminoazobenzene
1. 1,4-Dioxane-d8 (IS)	26. N-Nitrosopyrrolidine	51. N-Nitrosobutylamine	76. Acenaphthylene	99. Diallylate	124. Chlorobenzilate
2. 1,4-Dioxane	27. 3-Methylphenol	52. Caprolactam	77. 3-Nitroaniline	100. Phenacetin	125. 3,3'-Dimethylbenzidine
3. N-Nitrosodimethylamine	28. 4-Methylphenol	53. 1,4-Phenylenediamine	78. Acenaphthene-d10 (IS)	101. 4-Bromophenyl phenyl ether	126. Butyl benzyl phthalate
4. Pyridine	29. Acetophenone	54. 4-Chloro-3-methylphenol	79. Acenaphthene	102. Hexachlorobenzene	127. Kepone
5. Ethyl methacrylate	30. N-Nitrosodipropylamine	55. Isoaflato (isomer)	80. 2,4-Dinitrophenol	103. Atrazine	128. Bis(2-ethylhexyl) adipate
6. 2-Picoline	31. 4-Nitrosomorpholine	56. 2-Methylnaphthalene	81. 4-Nitrophenol	104. 4-Aminobiphenyl	129. 2-Acetylaminofluorine
7. N-Nitrosomethylethylamine	32. o-Toluidine	57. 1-Methylnaphthalene	82. Pentachlorobenzene	105. Pentachlorophenol	130. 3,3'-Dichlorobenzidine
8. Methyl methanesulfonate	33. Hexachloroethane	58. Hexachlorocyclopentadiene	83. 2,4-Dinitrotoluene	106. Pentachloronitrobenzene	131. Benzo[a]anthracene
9. 2-Fluorophenol (SS)	34. Nitrobenzene-D5 (SS)	59. 1,2,4,5-Tetrachlorobenzene	84. Dibenzofuran	107. Propylamide	132. Chrysene-D12 (IS)
10. N-Nitrosodiethylamine	35. Nitrobenzene	60. Isoaflato (isomer)	85. 1-Naphthalamine	108. Phenanthrene-D10 (IS)	133. Bis(2-ethylhexyl)phthalate
11. Ethyl methanesulfonate	36. N-Nitrosopiperidine	61. 2,4,6-Trichlorophenol	86. 2,3,5,6-Tetrachlorophenol	109. Phenanthrene	134. Chrysene
12. Benzaldehyde	37. Isophorone	62. 2,4,5-Trichlorophenol	87. 2,3,4,6-Tetrachlorophenol	110. Anthracene	135. Di-n-octyl phthalate
13. Phenol-d6 (SS)	38. 2-Nitrophenol	63. 2-Fluorobiphenyl (SS)	88. 2-Naphthalamine	111. Carbazole	136. 7,12-Dimethylbenzo[a]anthracene
14. Phenol	39. 2,4-Dimethylphenol	64. Saffrole	89. Diethyl phthalate	112. di-n-Butyl phthalate	137. Benzo[b]fluoranthene
15. Aniline	40. Bis(2-chloroethoxy)methane	65. Biphenyl	90. 4-Chlorophenyl phenyl ether	113. 4-Nitroquinoline 1-oxide	138. Benzo[k]fluoranthene
16. Bis(2-chloroethyl) ether	41. Benzoic acid	66. 2-Chloronaphthalene	91. Fluorene	114. Methapyriline	139. Benzo[a]pyrene
17. Pentachloroethane	42. 2,4-Dichlorophenol	67. 1-Chloronaphthalene	92. 2-Methyl-5-nitroaniline	115. Isodrin	140. Perylene-D12 (IS)
18. 2-Chlorophenol	43. α,α-Dimethylphenethylamine	68. Diphenyl ether	93. 4-Nitroaniline	116. Fluoranthene	141. 3-Methylcholanthrene
19. 1,3-Dichlorobenzene	44. 1,2,4-Trichlorobenzene	69. 2-Nitroaniline	94. 4,6-Dinitro-2-methylphenol	117. Benzidine	142. Dibenz[a,j]acridine
20. 1,4-Dichlorobenzene-D4 (IS)	45. Naphthalene-D8 (IS)	70. 1,4-Naphthoquinone	95. N-nitrosodiphenylamine (as Diphenylamine)	118. Pyrene-d10 (SS)	143. Indeno[1,2,3-cd]pyrene
21. 1,4-Dichlorobenzene	46. Naphthalene	71. 1,4-Dinitrobenzene	96. 1,2-Diphenylhydrazine (as Azobenzene)	119. Pyrene	144. Dibenz[a,h]anthracene
22. Benzyl alcohol	47. 4-Chloroaniline	72. Dimethyl phthalate	97. 2,4,6-Tribromophenol (SS)	120. Aramite (isomer)	145. Benzo[ghi]perylene
23. 1,2-Dichlorobenzene	48. 2,6-Dichlorophenol	73. 1,3-Dinitrobenzene		121. p-Terphenyl-d14 (SS)	
24. 2-Methylphenol	49. Hexachloropropene	74. 2,6-Dinitrotoluene		122. Aramite (isomer)	

**Column** Rxi-5Sil MS, 30 m, 0.25 mm ID, 0.25 μm (cat.# 13623)  
**Standard/Sample** 8270 MegaMix (cat.# 31850)  
 8270 Benzidines mix (cat.# 31852)  
 Benzoic acid (cat.# 31879)  
 Revised B/N surrogate mix (cat.# 31888)  
 Acid surrogate mix (4/89 SOW) (cat.# 31063)  
 Revised SV internal standard mix (cat.# 31886)  
 Appendix IX mix #1 (see notes)  
 Appendix IX mix #2 (cat.# 31806)  
 Dichloromethane  
 Conc.: 10 μg/mL (1,4-Dioxane and IS/SS 20 ug/mL)

**Diluent:**  
 Conc.: 10 μg/mL (1,4-Dioxane and IS/SS 20 ug/mL)

**Injection**  
 Inj. Vol.: 1 μL pulsed splitless (hold 0.59 min)  
 Liner: Premium 4 mm single taper w/wool (cat.# 23303)  
 Inj. Temp.: 270 °C  
 Pulse Pressure: 30 psi (206.8kPa)

**Pulse Time:** 0.64 min  
**Purge Flow:** 100 mL/min  
**Oven**  
 Oven Temp.: 40 °C (hold 1 min) to 280 °C at 25 °C/min to 320 °C at 5 °C/min (hold 1 min)

**Carrier Gas**  
 Flow Rate: He, constant flow  
 1.2 mL/min  
 Linear Velocity: 39.723 cm/sec at 40 °C

**Detector**  
 Mode: MS  
 Scan  
 Transfer Line Temp.: 280 °C  
 Analyzer Type: Quadrupole  
 Source Temp.: 276 °C  
 Quad Temp.: 150 °C  
 Solvent Delay Time: 2.19 min  
 Tune Type: DFTPP

**Ionization Mode:** EI  
**Scan Range:** 35-550 amu  
**Scan Rate:** 5.36 scans/sec  
**Instrument** Agilent 7890A GC & 5975C MSD

**Notes**  
 A 7890 Siltek-treated EZ Twist Top split/splitless injection port (cat.# 22178) and Fil Seal dual Vespel inlet seal (cat.# 23411) were used for this analysis.

Note that the Appendix IX mix #1 used here was an older formulation containing methapyriline. To minimize degradation, it has been discontinued and replaced with a reformulated standard, Appendix IX mix #1 (cat.# 32459), which does not contain methapyriline. For best results, we recommend using the new formulation and a separate methapyriline standard (cat.#32460) along with an Rxi-SVOCms column, which was designed specifically for improved semivolatiles analysis.