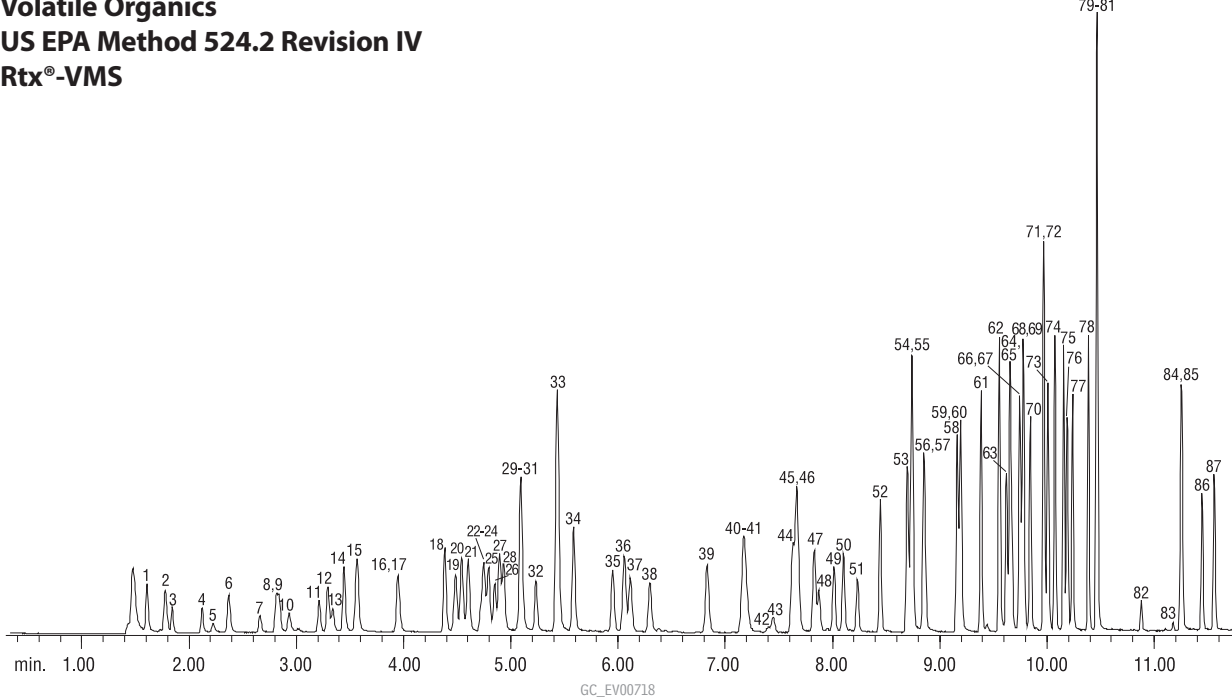


**Volatile Organics**  
**US EPA Method 524.2 Revision IV**  
**Rtx®-VMS**

79-81



GC\_EV00718

**Purge and Trap Conditions:**

Concentrator: Tekmar LSC-3100 purge and trap  
 Trap: Vocarb 3000 (type K)  
 Purge: 11 min. @ 40 mL/min. @ ambient temperature.  
 Dry purge: 1 min. @ 40mL/min. (MCS bypassed using Silcosteel® tubing)  
 Desorb preheat: 245°C  
 Desorb: 250°C for 2 min., flow 33mL/min.  
 Bake: 260°C for 8 min.  
 Interface: Silcosteel® transfer line  
 1:30 split at injection port. 1mm ID split inlet liner (cat.# 20972).

Column: Rtx®-VMS, 30m, 0.25mm ID, 1.4µm (cat.# 19915)  
 Sample: 502.2 Calibration Mix #1 (cat.# 30042)  
 Drinking Water VOA MegaMix™, 524.2 Rev 4 (cat.# 30601)  
 524 Internal Standard/Surrogate Mix (cat.# 30201)  
 Ketone Mix, EPA Method 524.2 Rev 4.1 (cat.# 30602)  
 Compounds at 20 ppb each in 5mL RO water (ketones at 50ppb; internal standards at 40ppb)  
 Inj. temp.: 250°C  
 Carrier gas: helium, constant flow  
 Flow rate: 1.1mL/min.  
 Dead time: 1.48 min. @ 40°C  
 Oven temp.: 40°C (hold 2 min.) to 85°C @ 14°C/min. (hold 2 min.) to 220°C @ 30°C/min. (hold 4 min.).  
 Det: Agilent 5971A GC/MS  
 Transfer line temp.: 280°C  
 Scan range: 35-300 amu  
 Tune: PFTBA/BFB  
 Ionization: EI

- |                                      |                           |                                       |   |                                 |
|--------------------------------------|---------------------------|---------------------------------------|---|---------------------------------|
| 1. dichlorodifluoromethane           | 19. 2,2-dichloropropane   | 37. bromodichloromethane              | 55. 1,1,1,2-tetrachloroethane           | 73. 1,2,4-trimethylbenzene      |
| 2. chloromethane                     | 20. bromochloromethane    | 38. methyl methacrylate               | 56. <i>m</i> -xylene                    | 74. <i>sec</i> -butylbenzene    |
| 3. vinyl chloride                    | 21. chloroform            | 39. <i>cis</i> -1,3-dichloropropene   | 57. <i>p</i> -xylene                    | 75. <i>p</i> -isopropyltoluene  |
| 4. bromomethane                      | 22. methyl acrylate       | 40. toluene                           | 58. <i>o</i> -xylene                    | 76. 1,3-dichlorobenzene         |
| 5. chloroethane                      | 23. carbon tetrachloride  | 41. chloroacetonitrile                | 59. styrene                             | 77. 1,4-dichlorobenzene         |
| 6. trichlorofluoromethane            | 24. tetrahydrofuran       | 42. 2-nitropropane                    | 60. bromoform                           | 78. <i>n</i> -butylbenzene      |
| 7. diethyl ether                     | 25. 1,1,1-trichloroethane | 43. 1,1-dichloropropanone             | 61. isopropylbenzene                    | 79. hexachloroethane            |
| 8. 1,1-dichloroethene                | 26. 2-butanone            | 44. 4-methyl-2-pentanone              | 62. 4-bromofluorobenzene                | 80. 1,2-dichlorobenzene-d4      |
| 9. carbon disulfide                  | 27. 1,1-dichloropropene   | 45. tetrachloroethene                 | 63. bromobenzene                        | 81. 1,2-dichlorobenzene         |
| 10. iodomethane                      | 28. 1-chlorobutane        | 46. <i>trans</i> -1,3-dichloropropene | 64. <i>n</i> -propylbenzene             | 82. 1,2-dibromo-3-chloropropane |
| 11. allyl chloride                   | 29. propionitrile         | 47. 1,1,2-trichloroethane             | 65. 1,1,2,2-tetrachloroethane           | 83. nitrobenzene                |
| 12. methylene chloride               | 30. methacrylonitrile     | 48. ethyl methacrylate                | 66. 2-chlorotoluene                     | 84. hexachlorobutadiene         |
| 13. acetone                          | 31. benzene               | 49. dibromochloromethane              | 67. 1,2,3-trichloropropane              | 85. 1,2,4-trichlorobenzene      |
| 14. <i>trans</i> -1,2-dichloroethene | 32. 1,2-dichloroethane    | 50. 1,3-dichloropropane               | 68. 1,3,5-trimethylbenzene              | 86. naphthalene                 |
| 15. methyl <i>tert</i> -butyl ether  | 33. fluoroethane          | 51. 1,2-dibromoethane                 | 69. <i>trans</i> -1,4-dichloro-2-butene | 87. 1,2,3-trichlorobenzene      |
| 16. 1,1-dichloroethane               | 34. trichloroethene       | 52. 2-hexanone                        | 70. 4-chlorotoluene                     |                                 |
| 17. acrylonitrile                    | 35. dibromomethane        | 53. chlorobenzene                     | 71. <i>tert</i> -butylbenzene           |                                 |
| 18. <i>cis</i> -1,2-dichloroethene   | 36. 1,2-dichloropropane   | 54. ethylbenzene                      | 72. pentachloroethane                   |                                 |